CRU Prices

Fertilizer WeekMethodology and
Definitions Guide

July 2018





CRU Prices1		
1	Scope	4
2	Methodology	
3	Definitions	
UR	REA PRILLED - FOB	
	REA PRILLED EXW	
	REA PRILLED CFR	
	REA GRANULAR FOB	
	REA GRANULAR FCA	
	REA GRANULAR CFR	
	REA GRANULAR DEL	
	AN – FOB	
	N – FCA	
	N – CFR	
	AN – CFR.	
_	N – DEL	_
	– FOB STEEL	
	– FOB CAPROLACTAM	
_	– CFR CAPROLACTAM	
	- FOB	
	US New Orleans	
	V – DEL	
	Western Canada	
	V – FOB.	
	V FCA	
	I - CFR	
	N – CIF	
	MMONIA FOB	
	MMONIA CFR	
	IOSPHATES DAP FOB	
	AP EXW	
	NP FCA	
	AP FOB	
	AP CFR	
	AP EXW	
	P FOB	
	P FCA	
	P CFR	
_	IOSPHORIC ACID FOB	
	IOSPHORIC ACID CFR	
	IOSPHATE ROCK FOB	
	IOSPHATE ROCK - CFR	
	P - CPT	_
	PKs FOB	
	PKS - CFR	
	PKs - CPT	
	PKs - CPT BAGGED	
	PKs - EXW	
	OTASH FOB STANDARD	
	OP – FOB BUL	
	DTASH FCA STANDARD	
	DTASH CFR STANDARD	



POTASH CFR STANDARD	84
POTASH FOB GRANULAR	85
POTASH CFR GRANULAR	
POTASH CIF GRANULAR	88
POTASH FOB GRANULAR	88
SOP FCA	89
SULPHUR FOB	89
SULPHUR EXW	
SULPHUR FCA	
SULPHUR CFR	95
SULPHUR FOB LIQUID	98
SULPHUR CPT LIQUID	98
SULPHUR CFR LIQUID	
SULPHURIC ACID CFR	100



Methodology and Definitions Guide – Fertilizer Week

1 Scope

This guide covers price benchmarks which appear in CRU's Fertilizer Week service and should be read in conjunction with the *CRU Group Compliance Framework and Methodology Guide*. It details commodity-specific methodology which have precedence, with all other aspects covered by the Group methodology guide.

2 Methodology

Data submitted and submission processes

Fertilizer Week price assessments are based on regular contact with a wide network of market participants. This network is constantly reviewed and expanded to ensure a balance of buyers and sellers, and actual activity in the market. Analysts use telephone, email and instant messaging services to collect market intelligence as well and to verify the information received.

Price assessors endeavour to record actual transactions and where possible to verify the details of these transactions with both sides. More weighting is given to transactions when assessing a price from a range of possible levels. However, some markets remain relatively illiquid and FW also considers bids and offers occurring in the market, judged against recent activity by those contacts, and also factors in, where appropriate, market sentiment about price movement.

Transactions must meet the minimum volumes established in CRU's methodology for individual prices; they must also meet all the other definitions set out in this document.

Final benchmark calculation

Price assessments reflect actual deals concluded and information is gathered through consultation with producers, buyers, traders and shipping companies. Each deal is verified with both parties to the deal and where this is not possible, a third and fourth party are consulted. FOB prices are derived either from direct sales from producers to traders/buyers or from netbacks on CFR sales based on estimated or actual freight rates. CFR prices are sometimes assessed on the basis of prevailing FOB prices and estimated freights.

Price ranges reflect the lowest and highest deal concluded during the week from Friday to Thursday, with a weighting towards the overall trend in the market towards the end of the reporting week, if a market is particularly volatile. When collecting a range of prices, assessors will exclude obvious outliers.

If a market has been quiet during the week, with no deals confirmed to have been concluded, prices are usually rolled over. The status of a price will be marked "indicative" if no trades have been confirmed.

We may also change a price in the absence of trades - for example if there is a strong market trend up or down - with reference to firm bids and offers. Again, this would be marked an "indicative" price in the footnotes. In this instance the reporter will tend to mention in the text of an accompanying "market update" why the price has been altered even in the absence of confirmed trades.

If no trades are confirmed beyond a period of three weeks, the price will be marked with a footnote denoting "no recent business". Should this inactivity extend beyond four to six weeks, a "no market" footnote will tend to be ascribed to the price. Once the market becomes active again and deals are concluded, a price will be published once more.

Sizes

Overall, transactions are typically for cargoes of 5,000 mt and over. However, smaller transactions do apply to some price assessments, e.g. US New Orleans barges and inland truck/rail market, Baltic/Black Sea/Europe deals. Otherwise, deals might be mentioned in the commentary or region entry for a particular fertilizer product, but their prices are not taken into account.



Timing

Assessments typically reflect latest transactions for product to be supplied within 30-45 days forward in the spot market. However, some US domestic transactions are only deemed spot if shipped within 14 days.

Contract prices are transactions done for large volumes over a one year, six months, quarterly or monthly shipping period. Contract prices are adjusted once a settlement is reached. However, contract pricing may settle ahead of the relevant period or delayed owing to prolonged contract price negotiations. In either instance, price assessments will be reflected accordingly.

If you have comments or questions about the methodology used by CRU to assess prices, or questions about particular prices, please email mike.gallagher@crugroup.com. To find out more about CRU's pricing products and services go to www.crugroup.com.

Final benchmark publication

Every price published by an FW assessor is reviewed by at least one other colleague before publication.

The final price assessment date is on Thursdays, when all 207 prices are updated on individual product pages. Prices published on the Thursday reflect transactions concluded in the industry over seven days, with a weighting towards the Thursday. Information on prices is gathered throughout the week and published on Thursday evening (GMT).

Deactivated prices

A price point will remain active as long as it can be demonstrated that there are sufficient number of buyers and sellers and/or traders which allow for the analyst to make an assessment of the price. If the price suffers from limited transparency due to a lack of the above mentioned factors or as business dynamics change (such as a traditional trade route ceases to exist due to emergence of new market competition), it will be deactivated. Its history will still be available to clients for a fee, should they require this information. However, no further price information will be collected for that price from the time it is deactivated.



3 Definitions

UREA PRILLED - FOB

Black Sea

Grade: Urea - prilled - 46% N. 90% 1-4 mm

Price basis: FOB.

Credit/Payment terms: Pre-payment, occasionally sight LC

Packaging: bulk

Loading Location: Yuzhnyy, Tuapse, Novorossiysk

Type: Spot
Currency: US dollar
Weight Unit: metric tonne

Size: Varies; trades for lots of 2,000 mt up to 65,000 mt are common. Timing: Prompt business up to five weeks ahead; occasionally six.

Main Consumer Markets: Worldwide.

Pricing: The key global price point for prills. Most exports are priced via negotiations through

spot deals between producers/marketers and traders/endusers. Key supply sources are

located in Russia and Ukraine: NF Trading (Group DF production units),

OPZ/AgroFerTrans, DnieproAzot, EuroChem. Salavat occasionally ships via Yuzhnyy.

No export taxes. EU plus Turkey charge 6.5% on imports from Russia. Ukraine duty is

5.5% (Change from 6.5%).

Notional assessment: A rare occurrence. A week hardly ever passes without any trades. Firm offers and bids

are used to set a range in the absence of trading, as are netback calculations on

confirmed CFR sales.

Background: Price series launched May 2000.

Baltic Sea

Duties/Tariffs:

Grade: Urea - prilled - 46%. 90% 1-4 mm

Price basis: FOB.

Credit/Payment terms: Pre-payment, occasionally sight LC

Packaging: bulk

Loading Location: Ventspils, St. Petersburg, Riga, Klaipeda, Muuga

Consumer areas: Worldwide, but emphasis on northwest Europe, Africa and Americas.

Type: Spot
Currency: US dollar
Weight Unit: metric tonne

Size: Varies; trades for lots of 2,000 mt up to 45,000 mt are common.

Timing: Prompt business up to five weeks ahead; occasionally six

Key Supply Sources: Russia and Belarus. Estonia when Nitrofert runs. Lithuania when Achema produces urea

(recently tended to drop urea output in favour of UAN).

Loading Location: Mesaieed/Qatar and Jubail/Saudi Arabia

Consumer areas: Regional markets with emphasis on Indian Subcontinent, the US, East Africa and Latin

America

Type: Spot, except for Saudi soft finance deals with Pakistan, when applicable. Sabic and Qafco

occasionally sign 30-60 days contracts for Sudan. Both supply formula-based contract

cargoes to BCIC/Bangladesh under government to government financing.

Currency: US dollar Weight Unit: metric tonne

Size: Varies; trades for lots of 10,000 mt up to 40,000 mt are common. Timing: Prompt business up to five weeks ahead; occasionally six

Key Supply Sources: Qafco and Sabic

Pricing: A relatively central global price point for prills. Most exports are priced via negotiations

for spot deals between producers/ marketers and traders/endusers. Key suppliers are

EuroChem, TogliattiAzot, Salavat, Grodno, Phosagro, Sibur/Citco.

Duties/Tariffs: No export taxes on Qatar and Saudi exports.

Notional assessment: A relatively rare occurrence. Most weeks at least one trade. Firm offers and bids are

used to set a range in the absence of trading, as are netback calculation on confirmed

CFR sales.



Background: Price series launched April 1999.

Indonesia

Grade: Urea - prilled - 46% N. 90% 1-4 mm

Price basis: FOB.
Credit/Payment terms: Sight LC
Packaging: bulk

Loading Location: PIM/Lokhseumawe, Pusri/Palembang and Gresik/Gresik. Kujang occasionally offers prills

in bags.

Consumer areas: Regional markets and Indian Subcontinent.

Type: Spot, via sales tenders conducted by Pusri Holdings (Persero).

Currency: US dollar Weight Unit: metric tonne

Size: Varies; trades for lots of 5,000 mt up to 20,000 mt are common.

Timing: Prompt business up to four weeks ahead.

Key Supply Sources: PIM, Pusri and Gresik (Gresik is bagged urea as is Kujang).

Pricing: A relatively central regional price point for prills. Mostly traded for regional markets, e.g.

Philippines, Taiwan. Philippines regularly pays premium for PIM and Pusri low-biuret urea (biuret at max 0.5% vs. standard max 1.0% for pineapple plantations. Key buyer for Philippines is Universal Trading. Pusri tends to set reserve prices (minimum acceptable)

in sales tender.

Duties/Tariffs: No export taxes on Indonesian exports.

Notional assessment: Not applicable. If there are no tenders, prices are left per last sale, with annotation 'no

recent business'.

Background: Price series launched April 1987 when the publication was launched.

China

Grade: Urea - prilled - 46% N. 90% 1-4 mm

Price basis: FOB.

Credit/Payment terms: Sight LC or prepayment

Packaging: bulk (loaded from bags, opened in ports)

Loading Location: Essentially all Chinese ports, but key locations are Yantai, Yingkou, Jinzhou,

Qinhuangdao, Zhangjiang, Zhangjiagang, Rizhao, Zhenhai and Longkou.

Consumer areas: Worldwide, but emphasis on regional markets and Indian Subcontinent.

Type: Spot.
Currency: US dollar
Weight Unit: metric tonne

Size: Varies; trades for lots of 5,000 mt up to 50,000 mt are common.

Timing: Prompt business up to five weeks ahead.

Key Supply Sources: CNAMPGC, Sinofert, Sinochem, Sinopec and direct producers.

Pricing: Extensive communications with main contacts including producers, traders and

endusers.

Duties/Tariffs: Export tax is RMB 40/mt in off-season (July 1 through October 31 in 2014). High season

tax is 15% on net export value plus RMB 40/mt (January 1-June 30 and November 1-December 31 in 2014). EU duty:
6.5% (non-preferential customs duty rate

applies: Common Customs Tariff – CCT).

Notional assessment: A relatively rare occurrence. Most weeks will have at least one trade during low-tax

window and in ensuing months via bonded warehouses.

Background: Price series launched November 2000.

US New Orleans barge

Grade: Granular 46-0-0

Price basis: FOB st
Credit/Payment terms: Cash/sight
Packaging: bulk

Loading Location: Barges loaded from plants in US Gulf or vessels discharging along lower Mississippi River

in Louisiana.

Type: Spot



Currency: US dollars
Weight Unit: short ton
Size: 1,500 st

Timing: Prompt business generally refers to product to be delivered within two weeks.

Main Consumer Markets: Distributors along the entire 4 length of the Mississippi River system, including the Ohio,

Illinois and Arkansas rivers. Primarily shipped to distributors selling to retailers that serve growers. Pricing: Comments collected from producers, importers and distributors along the river system. Sales beyond the barge market generally based on contract business.

Duties/Tariffs: No major granular suppliers affected by duties or tariffs. However, Iranian imports

currently banned by US and UN sanctions.

Notional Assessment: Usually indicated even or \$5-10/st above spot granular urea values.

Background: Price series launched August 2001.

UREA PRILLED EXW

China

Grade: prilled urea 46-0-0

Price basis: EXW

Credit/Payment terms: typically cash payment or acceptance bill Packaging: typically 50kg/bag, sometimes 1 tonne/bag

Loading Location: North China, such as Shandong, Shanxi, Hebei, Henan

Type: spot sales.
Currency: renminbi
Weight Unit: metric tonne

Size: depends on buyers' option. Normally 100 mt at least.

Timing: a couple of days to a week. Key Supply Sources: producers in North China.

Pricing: Reflects northern producers' sales, which normally impact the export price of urea. Luxi

Chemical and big producers in Shanxi are typically taken into account for the

assessments.

Duties/Tariffs: Not applicable.

Notional Assessment: In the absence of business, firm bids and offers to be incorporated into assessment.

Background: Price series launched January 2008.

UREA PRILLED CFR

Mediterranean (duty paid)

Grade: Urea - prilled - 46% N. 90% 1-4 mm

Price basis: CFR

Credit/Payment terms: Sight LC or deferred payment up to 180 days from BL date

Packaging: bulk

Delivery Location: Turkey, Lebanon, Syria, Italy, Spain, North Africa.

Type: Spot.
Currency: US dollar
Weight Unit: metric tonne

Size: Varies; trades for lots of 5,000 mt up to 20,000 mt are common.

Timing: Prompt business up to five weeks ahead. Key Supply Sources: Romania, Russia, Ukraine, Croatia.

Pricing: Communications with main contacts including producers, traders and endusers in

Turkey, Italy and Spain.

Duties/Tariffs: 6.5% tax on Russian plus Middle East and 5.5% on Ukrainian product must be kept in

mind.

Notional assessment: A relatively rare occurrence. Most weeks will have at least one trade, but FOB plus

freight/ cost calculations based on prevailing Yuzhnyy (adjusted for duty element),

Romanian/Bulgarian FOB price are often used.

Background: Price series launched May 2006.



India

Grade: Urea - prilled - 46% N. 90% 1-4 mm (India also takes granular, but does not pay premium)

Price basis: CFR
Credit/Payment terms: Sight LC
Packaging: bulk

Delivery Location: East and West Coast Indian ports.

Type: Spot.
Currency: US dollar
Weight Unit: metric tonne

Size: Varies; trades for lots of 25,000 mt up to 55,000 mt are common. Timing: Strictly tender business, prompt business up to five weeks ahead.

Key Supply Sources: Middle East, China, FSU, Iran, Indonesia, Malaysia and occasionally Egypt.

Pricing: Price assessed against public tenders.

Duties/Tariffs: None.

Notional assessment: Not applicable. Prices assessed only when tenders take place, and otherwise prices

unchanged with 'no recent sales' annotation.

Background: Price series launched May 2006.

Vietnam

Grade: Urea - prilled - 46% N. 90% 1-4 mm

Price basis: CFR
Credit/Payment terms: Sight LC
Packaging: bulk

Delivery Location: Ho Chi Minh and Hai Phong. PetroVietnam sometimes discharges at own Phu My facility.

Border trade with China often very active.

Type: Spot.
Currency: US dollar
Weight Unit: metric tonne

Size: Varies; trades for lots of 5,000 mt up to 50,000 mt are common. 5

Timing: Strictly spot business, prompt up to five weeks ahead.

Key Supply Sources: Middle East, China, Indonesia, Malaysia and occasionally FSU.

Pricing: Communications with main contacts including producers, traders and endusers. Border-

trade closely monitored, as are the Dong/US dollar exchange rate and domestic interest

rates. Both significantly influence buyers' ability and willingness to import.

Duties/Tariffs: No import duties.

Notional assessment: Not common. FW mostly updates prices only when sales are concluded, but also

occasionally calculate delivered cost basis prevailing Chinese FOB numbers plus freight for indicative CFR value. Bid/offer spread occasionally used to assess figure when market

active, but no sales are concluded in week.

Background: Price series launched April 2005.

Philippines

Grade: Urea - prilled - 46% N. 90% 1-4 mm

Price basis: CFR

Credit/Payment terms: Sight LC. Philphos often keen to exchange urea for NPK.

Packaging: bulk

Delivery Location: All main Philippine ports. Philphos occasionally takes large (45-50,000 mt) cargoes to

own installation at Isabel.

Type: Spot and contract with Middle East.

Currency: US dollar Weight Unit: metric tonne

Size: Varies; trades for lots of 5,000 mt up to 15,000 mt are common. Larger cargoes the

exception.

Timing: Mostly spot business, prompt up to five weeks ahead.

Key Supply Sources: Middle East, China, Indonesia, Malaysia and occasionally FSU.

Pricing: Communications with main contacts including producers, traders, domestic distributors

and endusers.

Duties/Tariffs: No import duties.



Notional assessment: Prices are assessed when sales are concluded, but also calculated basis prevailing

Chinese FOB numbers plus freight for indicative CFR value. Bid/offer spread occasionally

used when market inactive.

Background: Price series launched April 2005.

EC Central America

Grade: Urea - prilled - 46% N. 90% 1-4 mm

Price basis: CFR

Credit/Payment terms: Sight LC or 30-60 days. Monomeros in Colombia calls for 30 days open account.

Packaging: bulk

Delivery Location: Key markets are Mexico, Colombia, Costa Rica, and Nicaragua.

Type: Spot.
Currency: US dollar
Weight Unit: metric tonne

Size: Varies; trades for lots of 15,000 mt up to 35,000 mt are common. Larger cargoes the

exception.

Timing: Mostly spot business, prompt up to five weeks ahead.

Key Supply Sources: FSU, Romania, Venezuela, China.

Pricing: Communications with main contacts, particularly endusers and traders. Regular suppliers

to the region include NF Trading, EuroChem and Uralchem. Much of the business

transacted is via tenders and is therefore relatively transparent.

Duties/Tariffs: No import duties.

Notional assessment: Relatively common. FW updates prices when sales are concluded, but also regularly

calculate delivered cost basis prevailing FSU FOB numbers plus freight for indicative CFR value. Bid/offer spread occasionally used to assess figure when market active, but no

sales are concluded in week.

Background: Price series launched May 2006.

Brazil

Grade: Urea - prilled - 46% N. 90% 1-4 mm

Price basis: CFR
Credit/Payment terms: Sight LC
Packaging: bulk

Delivery Location: All main Brazilian ports with emphasis on Santos and Paranagua.

Type: Spot. Producers regularly load vessels on speculation, and sell these piecemeal to

numerous importers while ships are en-route and/or awaiting turn to discharge.

Currency: US dollar Weight Unit: metric tonne

Size: Varies; trades for lots of 5,000 mt up to 35,000 mt are common. Larger cargoes the

exception.

Timing: Mostly spot business, prompt up to five weeks ahead. (see above)

Key Supply Sources: FSU, China.

Pricing: Communications with main contacts, particularly endusers and traders.

Duties/Tariffs: No import duties.

Notional assessment: Relatively common. FW updates prices when sales are concluded, but also regularly

calculate delivered cost basis prevailing FSU FOB numbers plus freight for indicative CFR value. Bid/offer spread occasionally used to assess figure when market active, but no

sales are concluded in week.

Background: Price series launched May 2006. 6

UREA GRANULAR FOB

Black Sea

Grade: Urea - Granular - 46% N. 90% 2-4 mm

Price basis: FOB.

Credit/Payment terms: Pre-payment, occasionally sight LC

Packaging: bulk



Loading Location: Yuzhnyy, Tuapse, Nikolaev.

Type: Spot
Currency: US dollar
Weight Unit: metric tonne

Size: Varies; trades for lots of 3,000 mt up to 45,000 mt are common. Timing: Prompt business up to five weeks ahead; occasionally six.

Main Consumer Markets: Worldwide, but emphasis on southern Europe and Americas.

Main Consumer Markets: Worldwide, but emphasis on southern Europe and Americas.

Pricing: A relatively important global price point for granular. Most expo

A relatively important global price point for granular. Most exports are priced via negotiations through spot deals between producers/marketers and traders/endusers. Key supply sources are located in Russia and Ukraine:

NF Trading (Group DF

production units), EuroChem and Salavat.

Duties/Tariffs: No export taxes. EU plus Turkey charge 6.5% on imports from Russia. Ukraine duty is

5.5%

Notional assessment: A relatively rare occurrence. A week hardly ever passes without any trades. Firm offers

and bids are used to set a range in the absence of trading, as are netback calculations on confirmed CFR sales. In the absence of confirmed sales and/or bids/offers, netback calculations on sales of duty free material from Egypt are used, adjusted for duty element and freight differentials. Similarly, confirmed inland sales and CFR deals for duty exempt product in key destinations such as Turkey, Italy, Spain and France are worked back, deducting costs, duty element and freight. Calculations are also employed on confirmed sales of granular urea in Latin America and on NOLA barge values, duly

adjusted for costs and quantity variances in the case of the latter.

Background: Price series launched November 2012.

Baltic Sea

Grade: Urea - Granular - 46% N. 90% 2-4 mm

Price basis: FOB.

Credit/Payment terms: Pre-payment, occasionally sight LC

Packaging: bulk

Loading Location: Mainly Klaipeda

Consumer areas: Worldwide, but emphasis on northwest Europe and Americas.

Type: Spot
Currency: US dollar
Weight Unit: metric tonne

Size: Varies; trades for lots of 2,000 mt up to 35,000 mt are common. Timing: Prompt business up to five weeks ahead; occasionally six

Key Supply Sources: Russia

Pricing: A relatively central global price point for granular. Most exports are priced via

negotiations for spot deals between producers/marketers and traders/ endusers. Key

suppliers are EuroChem and Salavat.

Duties/Tariffs: No export taxes. EU plus Turkey charge 6.5% on imports from Russia and Belarus.

Notional assessment:. Firm offers and bids are used to set a range in the absence of trading, as are netback calculations on

confirmed CFR sales. In the absence of confirmed sales and/or bids/offers, netback calculations on sales of duty free material from Egypt are used, adjusted for duty element and freight differentials. Similarly, confirmed inland sales and CFR deals for duty exempt product in key destinations such as UK, France, Germany and Benelux terminals are worked back, deducting costs, duty element and freight. Calculations are also employed on confirmed sales of granular urea in Latin America and on NOLA barge

values, duly adjusted for costs and quantity variances in the case of the latter.

Background: Price series launched November 2012.

Middle East Granular (US netback)

Grade: Urea - granular - 46% N. 90% 2-4 mm

Price basis: FOB.

Credit/Payment terms: Sight LC or CAD depending on customer standing.

Packaging: bulk

Loading Location: Mesaieed/Qatar, Jubail/Saudi Arabia, Shuaiba/Kuwait, Sitra/Bahrain, Ruwais/UAE,

Sohar/Oman



Type: Spot and contract.

Currency: US dollar Weight Unit: metric tonne

Size: Varies; trades for lots of 25,000 mt up to 50,000 mt are common. Timing: Prompt business up to five weeks ahead; occasionally six

Key Supply Sources: Qafco, Sabic, PIC/GPIC, Fertil and SIUCI.

Pricing: Communications with all main contacts including producers, traders and endusers. One

of three central global price point for granular. Assessed basis low/high ranges of spot and contract. Extensive contract volumes to US. Most exports outside contracts are

priced via negotiations for spot deals between producers/ marketers and

traders/endusers, and details are generally available on concluded sales. Netback calculation based on prevailing barge values in the US, applying the following formula: \$/st FOB nola - \$5/st handling * 1.1023 = \$/mt CFR - 7 freight+costs assessed from

Middle East = \$/mt FOB Middle East

Duties/Tariffs: No export tax.

Notional assessment: A relatively rare occurrence. Most weeks will have at least one trade unless production is

cut or if production is halted on poor market conditions. Firm offers and bids are used to

set a range in the absence of trading.

Background: Price series launched November 2012.

Middle East Granular (non US netback)

Grade: Urea - granular - 46% N. 90% 2-4 mm

Price basis: FOB.

Credit/Payment terms: Sight LC or CAD depending on customer standing.

Packaging: bulk

Loading Location: Mesaieed/Qatar, Jubail/Saudi Arabia, Shuaiba/Kuwait, Sitra/Bahrain, Ruwais/UAE,

Sohar/Oman

Type: Spot and contract.

Currency: US dollar Weight Unit: metric tonne

Size: Varies; trades for lots of 10,000 mt up to 50,000 mt are common. Timing: Prompt business up to five weeks ahead; occasionally six

Key Supply Sources: Qafco, Sabic, PIC/GPIC, Fertil and SIUCI. OMIFCO/Oman output is delivered exclusively to

India under JV contract.

Pricing: Communications with all main contacts including producers, traders and endusers. One

of three central global price point for granular. Assessed basis low/high ranges of spot and contract. Extensive contract volumes to Thailand, Australia, South Korea and New Zealand. Iranian prices are not included in the assessment. Most exports outside contracts are priced via negotiations for spot deals between producers/ marketers and

traders/ endusers.

Duties/Tariffs: No export tax. Pays 6.5% duty to EU.

Notional assessment: A relatively rare occurrence. Most weeks will have at least one trade unless production is

cut due to curtailments in natural gas or if production is halted on poor market

conditions. Firm offers and bids are used to set a range in the absence of trading, as are

netback calculation on confirmed CFR sales.

Background: Price series launched November 2012.

Middle East Granular (all netbacks)

Grade: Urea - granular - 46% N. 90% 2-4 mm

Price basis: FOB.

Credit/Payment terms: Sight LC or CAD depending on customer standing.

Packaging: bulk

Loading Location: Mesaieed/Qatar, Jubail/Saudi Arabia, Shuaiba/Kuwait, Sitra/Bahrain, Ruwais/UAE,

Sohar/Oman

Type: Spot and contract.

Currency: US dollar



Weight Unit: metric tonne

Size: Varies; trades for lots of 10,000 mt up to 50,000 mt are common. Timing: Prompt business up to five weeks ahead; occasionally six

Key Supply Sources: Qafco, Sabic, PIC/GPIC, Fertil and SIUCI. OMIFCO/Oman output is delivered exclusively to

India under JV contract.

Pricing: Communications with all main contacts including producers, traders and endusers. One

of three central global price point for granular. Assessed basis low/high ranges of spot

and contract, and is an aggregate of "US Netbacks" and "Non-US Netbacks".

Duties/Tariffs: No export tax. Pays 6.5% duty into EU.

Notional assessment: A relatively rare occurrence. Most weeks will have at least one trade unless production is

cut due to curtailments in natural gas or if production is halted on poor market

conditions. Firm offers and bids are used to set a range in the absence of trading, as are

netback calculation on confirmed CFR sales.

Background: Price series launched April 1999.

Granular FOB Iran

Grade: Urea - granular - 46% N. 90% 2-4 mm

Price basis: FOB.

Credit/Payment terms: Sight LC or CAD depending on customer standing.

Packaging: bulk

Loading Location: Main Iranian ports Assaluyeh, Bandar Khomeini, Bandar Abbas

Type: Spot and contract.

Currency: Values are assessed in US dollars but these are so far based on prices agreed in other

currencies at prevailing rates

Weight Unit: metric tonne

Size: Varies; trades for lots of 10,000 mt up to 50,000 mt are common.

Timing: Prompt business up to five weeks ahead; occasionally six

Key Supply Sources: Shiraz Petrochemical, Razi Petrochemical, National Petrochemical

Pricing: Communications with all main contacts including producers, traders and endusers

Duties/Tariffs: No export tax. Pays 6.5% duty to EU.

Notional assessment: Netback calculations on confirmed CFR sales in key markets are used to identify FOB

values. In the absence of business, firm bids and offers to be incorporated into

assessment if two weeks of market inactivity, with an "Indicative Price" notation. A "No

Recent Business" may be applied if no firm bids or 8

offers. A "no market" with null values is posted with four weeks or more of market inactivity.

Background: Price series launched September 2016

Urea Granular FOB Nigeria

Grade: Urea - granular - 46% N. 90% 2-4 mm

Price basis: FOB

Credit/Payment terms: Sight LC or CAD depending on customer standing.

Packaging: bulk

Loading Location: Port Harcourt, Nigeria - OIPL Port Terminal

Type: Spot and contract.

Currency: US\$

Weight Unit: metric tonne

Size: Varies; trades for lots of 10,000 mt up to 35,000 mt (max capacity at terminal) are

common.

Timing: Prompt business up to five weeks ahead; occasionally six

Key Supply Sources: Indorama Eleme Fertilizer & Chemicals

Pricing: Communications with the producer, traders with offtake contracts plus spot buyers and

endusers

Duties/Tariffs: No export tax. Pays 6.5% duty into EU.

Notional assessment: Netback calculations on confirmed CFR sales in key markets are used to identify FOB

values. In the absence of business, firm bids and offers to be incorporated into

assessment if two weeks of market inactivity, with an "Indicative Price" notation. A "No



Recent Business" may be applied if no firm bids or offers. A "no market" with null values

is posted with six weeks or more of market inactivity.

Background: Price series launched October 2016.

North Africa

Grade: Urea - granular - 46% N. 90% 2-4 mm

Price basis: FOB.

Credit/Payment terms: Sight LC or CAD depending on customer standing.

Packaging: bulk

Loading Location: Arzew, Algeria and Alexandria, Damietta, Abu Qir, Egypt.

Type: Spot/tender sales/possible offtake agreements.

Currency: US dollar
Weight Unit: metric tonne
Size: 3,000 to 40,000 mt

Timing: Prompt business up to five weeks ahead; occasionally six

Key Supply Sources: Producer Sorfert, Arzew (JV between Sonatrach and OCI) in Algeria. Producers MOPCO,

EFC, HFC, and AFC in Egypt.

Pricing: Communications with the producer, with JV partners and with buyers such as Yara, OCI,

Ameropa and Helm in the case of Algeria. Sales tenders in the case of Egypt where results are obtained from producers direct and from traders participating in the sessions.

Duties/Tariffs: No export duty. Algerian urea enters EU free of duty, but (so far) pays 6.5% in Turkey.

Egyptian urea is duty free in EU and in Turkey. Price is to reflect the low of the lows and

the high of highs, combined for Algeria and Egypt.

Notional Assessment: Most weeks will have at least one trade unless production is cut due to curtailments on

export regulations, cuts in natural gas or if production is halted on poor market

conditions. Firm offers and bids are used to set a range in the absence of trading, as are

netback calculation on confirmed CFR sales.

Background: Price series launched November 2013.

Egypt

Grade: Urea - granular - 46% N. 90% 2-4 mm

Price basis: FOB.

Credit/Payment terms: Sight LC or CAD depending on customer standing.

Packaging: bulk

Loading Location: Alexandria, Damietta, Abu Qir.

Type: Spot
Currency: US dollar
Weight Unit: metric tonne

Size:3,000 to 40,000 mt

Timing: Prompt business up to five weeks ahead; occasionally six

Key Supply Sources: Producers MOPCO, EFC, HFC, and AFC

Pricing: Communications with all producers, Sales are mostly affected via public tenders, and

information is relatively easy to access.

Duties/Tariffs: No export duty. Egyptian urea enters EU and Turkey free of duty.

Notional Assessment: A relatively rare occurrence. Most weeks will have at least one trade unless production is

cut due to curtailments in natural gas or if production is halted on poor market

conditions. Firm offers and bids are used to set a range in the absence of trading, as are

netback calculation on confirmed CFR sales.

Background: Price series launched July 2002.

Algeria

Grade: Urea - granular - 46% N. 90% 2-4 mm

Price basis: FOB.

Credit/Payment terms: Sight LC or CAD depending on customer standing.

Packaging: bulk

Loading Location: Arzew, Algeria

Type: Spot/tender sales/possible offtake agreements (yet to be 100% determined, but sales

tenders are the rule to-date) 9



Currency: US dollar Weight Unit: metric tonne

Size:3,000 to 40,000 mt

Timing: Prompt business up to five weeks ahead; occasionally six Key Supply Sources: Producer Sorfert, Arzew (JV between Sonatrach and OCI)

Pricing: Communications with the producer, with JV partners and with buyers such as Yara, OCI,

Ameropa and Helm (To date).

Duties/Tariffs: No export duty. Algerian urea enters EU free of duty, but (so far) pays 6.5% in Turkey. Notional Assessment: Most weeks will have at least one trade unless production is cut due to curtailments on

export regulations, cuts in natural gas or if production is halted on poor market

conditions. Firm offers and bids are used to set a range in the absence of trading, as are

netback calculation on confirmed CFR sales.

Background: Price series launched November 2013.

Malaysia

Grade: Urea - granular - 46% N. 90% 2-4 mm

Price basis: FOB.

Credit/Payment terms: Prepay or sight LC

Packaging: bulk

Loading Location: Granular is produced by Petronas at Gurun and by ABF (65% owned by Petronas) at

Bintulu. Sales are made by Petronas Chemical Marketing (PCM), formerly Mitco.

Type: Mainly contract business, primarily for Thailand. Occasional spot sales.

Currency: US dollar Weight Unit: metric tonne

Size: Varies; trades for lots of 5,000 mt up to 40,000 mt are common.

Timing: Prompt business up to four weeks ahead.

Key Supply Sources: PCM

Pricing: Communications with main contacts including producers, traders and endusers. A

relatively central regional price point for granular. Mostly traded for regional markets,

e.g. Philippines, Taiwan, but has also traded for India in recent years.

Duties/Tariffs: No export taxes on Malaysian exports.

Notional assessment: Rarely applicable. If there is no new business, prices are left per last sale, with

annotation 'no recent business'.

Background: Price series launched April 2005.

Indonesia

Grade: Urea - granular - 46% N. 90% 1-4 mm

Price basis: FOB.
Credit/Payment terms: Sight LC
Packaging: bulk

Loading Location: Kaltim/Bontang and Pusri/Palembang.

Type: Spot, via sales tenders conducted by Pusri Holdings (Persero).

Currency: US dollar Weight Unit: metric tonne

Size: Varies; trades for lots of 5,000 mt up to 40,000 mt are common.

Timing: Prompt business up to four weeks ahead.

Key Supply Sources: Pusri and Kaltim

Pricing: Set via sales tenders so easy to track. A relatively central regional price point for

granular. Mostly traded for regional markets, e.g. Thailand, Australia, Taiwan and South Korea, but is also shipped to Indian Subcontinent and sometimes to Americas, including US Gulf. Important: Pusri tends to set reserve prices (minimum acceptable) in sales

tender.

Duties/Tariffs: No export taxes on Indonesian exports.

Notional assessment: Not applicable. If there are no tenders, prices are left per last sale, with annotation 'no

recent business'.

Background: Price series launched April 2005.

Venezuela/Trinidad



Grade: Granular urea

Price basis: FOB mt (Venezuela) and CFR mt (Venezuela and Trinidad)

Credit/Payment terms: Cash Packaging: bulk

Loading Location: Bahia Blanca, Venezuela and Point Lisas, Trinidad and Tobago

Type: Spot
Currency: US dollars
Weight Unit: metric ton
Size: 6-20,000 mt

Timing: Typically 30 days, but can be shorter.

Main Consumer Markets: US, Mexico, Western Europe.

Pricing: Venezuelan business is quoted for export on a FOB or CFR basis to its destination.

Trinidad exports are only cited on a delivered or CFR basis to markets in the Americas

and Europe. All Trinidad sales are made by PotashCorp.

Duties/Tariffs: None.

Notional Assessment: After 30 days without confirmed business, recent trade in markets around the Caribbean

can be used to infer a new FOB value.

Background: Price series launched February 2000.

US New Orleans barge Spot

Grade: Granular 46-0-0

Price basis: FOB st
Credit/Payment terms: Cash/sight
Packaging: bulk

Loading: Barges loaded from plants in US Gulf or vessels discharging along lower Mississippi River

in Louisiana. 10

Type: Spot
Currency: US dollars
Weight Unit: short ton
Size: 1,500 st

Timing: Prompt business generally refers to product to be delivered within two weeks.

Main Consumer Markets: Distributors along the entire length of the Mississippi River system, including the Ohio,

Illinois and Arkansas rivers. Primarily shipped to distributors selling to retailers that serve

growers.

Pricing: Business reported by producers, importers and traders along the river system.

Duties/Tariffs: No major granular suppliers affected by duties or tariffs. However,

Iranian imports currently banned by US and UN sanctions.

Notional Assessment: Bids and offers can be used for indications in the absence of spot business for more than

two weeks; a VERY rare occurence.

Background: Price series launched August 2001.

US Midwest

Grade: Granular 46-0-0

Price basis: FOB
Credit/Payment terms: Cash/sight
Packaging: bulk

Loading Location: River terminals and inland warehouses across the region.

Type: Spot
Currency: US dollar
Weight Unit: short ton
Size: Typically 25 st

Timing: Prompt business generally calls for pickup within two weeks.

Key Supply Sources: Product is railed by producers in the US and Canada, or from US Gulf and East Coast

ports from overseas plants.

Pricing: Business reported by producers, traders, distributors and retailers. Most product enters

the region by barge or rail, before being distributed by the truckload.

Duties/Tariffs: Not applicable



Notional Assessment: Bid and offer spreads between distributors and retailers or other suppliers can be useful

in the absence of new business for at least two weeks.

Background: Price series launched July 1990.

US Great Lakes

Grade: Granular 46-0-0

Price basis: FOB
Credit/Payment terms: Cash/sight.
Packaging: bulk

Loading Location: River terminals and inland warehouses across Northern Minnesota, Michigan and

Wisconsin.

Type: Spot
Currency: US dollar
Weight Unit: short ton
Size: Typically 25 st

Timing: Prompt business generally calls for pickup within two weeks.

Key Supply Sources: Product is railed by producers in the US and Canada, or barged from the US Gulf.

Pricing: Business reported by producers, traders, distributors and retailers. Most product enters

the region by barge or rail, before being distributed by the truckload.

Duties/Tariffs: Not applicable

Notional Assessment: Bid and offer spreads between distributors and retailers or other suppliers can be useful

in the absence of spot business for at least two weeks.

Background: Price series launched July 2002.

US Southern Plains

Grade: Granular 46-0-0

Price basis: FOB

Credit/Payment terms: Cash/sight. Packaging: bulk

Loading Location: River terminals and inland warehouses in Arkansas, Oklahoma, Texas and western

Kansas.

Type: Spot
Currency: US dollar
Weight Unit: short ton
Size: Typically 25 st

Timing: Prompt business generally calls for pickup within two weeks.

Key Supply Sources: Product is railed by producers mostly in the US or barged from the US Gulf from overseas

plants.

Pricing: Business reported by producers, traders, distributors and retailers. Most product enters

the region by barge or rail, before being distributed by the truckload.

Duties/Tariffs: Not applicable

Notional Assessment: Bid and offer spreads between distributors and retailers or other suppliers can be useful

in the absence of spot business for at least two weeks.

Background: Price series launched July 1990.

US Arkansas River

Grade: Granular 46-0-0

Price basis: FOB
Credit/Payment terms: Cash/sight.
Packaging: bulk

Loading Location: River terminals and inland warehouses in Arkansas, Western Kansas and Oklahoma.

Type: Spot 11
Currency: US dollar
Weight Unit: short ton
Size: Typically 25 s

Timing: Prompt business generally calls for pickup within two weeks.

Key Supply Sources: Product is railed by producers mostly in the US or barged from the US Gulf from overseas

plants.



Pricing: Business reported by producers, traders, distributors and retailers. Most product enters

the region by barge or rail, before being distributed by the truckload.

Duties/Tariffs: Not applicable

Notional Assessment: Bid and offer spreads between distributors and retailers or other suppliers can be useful

in the absence of spot business for at least two weeks.

Background: Price series launched July 2002.

US Texas Coast

Grade: Granular 46-0-0

Price basis: FOB
Credit/Payment terms: Cash/sight
Packaging: bulk

Loading Location: Terminals along the Texas coast and inland warehouses in Texas.

Type: Spot
Currency: US dollar
Weight Unit: short ton
Size: Typically 25 st

Timing: Prompt business generally calls for pickup within two weeks.

Key Supply Sources: Product is railed by producers mostly in the US or discharged in the US Gulf from

overseas plants.

Pricing: Business reported by producers, traders, distributors and retailers. Most product enters

the region from overseas cargos or by rail, before being distributed by truckload and rail.

Duties/Tariffs: Not applicable

Notional Assessment: Bid and offer spreads between distributors and retailers or other suppliers can be useful

in the absence of spot business for at least two weeks.

Background: Price series launched July 2002.

US South

Grade: Granular 46-0-0

Price basis: FOB
Credit/Payment terms: Cash/sight.
Packaging: bulk

Loading Location: River terminals and inland warehouses primarily in Louisiana, Mississippi, Tennessee.

Type: Spot
Currency: US dollar
Weight Unit: short ton

Size: Typically 25 st trucks or 100 st rail cars.

Timing: Prompt business generally calls for pickup within two weeks.

Key Supply Sources: Product is distributed by producers by rail and truck mostly in the US.

Pricing: Business reported by producers, traders, distributors and retailers. Most product is

distributed by truckloads from inland warehouses, arriving by rail or barges.

Duties/Tariffs: Not applicable

Notes: Urea generally is the first choice for nitrogen in the region, followed by UAN and

ammonia and AN.

Notional Assessment: Bid and offer spreads between distributors and retailers or other suppliers can be useful

in the absence of spot business for at least two weeks.

Background: Price series launched January 1998.

US East Coast

Grade: Granular 46-0-0

Price basis: FOB
Credit/Payment terms: Cash/sight.
Packaging: bulk

Loading Location: Warehouses at ports along the Atlantic Coast north and south of Mason-Dixon, plus sales

from the PotashCorp plant at Augusta GA.

Type: Spot
Currency: US dollar
Weight Unit: short ton



Size: Typically 25 st trucks or 100 st rail cars.

Timing: Prompt business generally calls for pickup within two weeks.

Key Supply Sources: The vast majority arrives from Egypt, but some cargos also discharge from Venezuela and

Trinidad.

Pricing: Business reported by producers, traders, distributors and retailers. Urea generally is

imported in cargos of 20-30,000 mt.

Duties/Tariffs: 1.17% duty on urea from EuroChem plants in FSU. All other FSU material effectively

barred by prohibitive tariff.

Notional Assessment: Bid and offer spreads between distributors and retailers or other suppliers can be useful.

Background: Price series launched March 2006.

US Twin Cities

Grade: Granular 46-0-0

Price basis: FOB st
Credit/Payment terms: Cash/sight
Packaging: bulk

Loading: Trucks/rail cars usually loaded from warehouses or rarely directly from barges in the

Minneapolis, St. Paul area of Minnesota.

Type: Spot 12
Currency: US dollars
Weight Unit: short ton

Size: 25 st (truck) or 100 st (rail)

Timing: Prompt business generally refers to product to be delivered within two weeks.

Main Consumer Markets: Distribution to agricultural retailers serving growers primarily in Minnesota but also

more distant markets including the Dakotas by rail.

Pricing: Business reported by producers, co-ops and independent distributors.

Duties/Tariffs: N/A.

Notional Assessment: In an extended absence of new business distributors' postings or fill offers for the region

from producers can be used to provide an indicative price

Background: Price series launched December 31, 2015

UREA GRANULAR FCA

China

Grade: Urea – granular – 46% N. 90% 2-4 mm

Price basis: FCA from warehouse at railway station.

Credit/Payment terms: typically cash payment or acceptance bill typically 50kg/bag, sometimes 1 tonne/bag

Loading Location: North China, such as Shanxi.

Type: Spot sales.
Currency: renminbi
Weight Unit: metric tonne

Size: depends on buyers' option. Normally 100 mt at least.

Timing: a couple of days to a week. Key Supply Sources: producers in North China.

Pricing: Reflects northern producers' sales, which normally impact the export price of urea.

Tianze and other big producers in Shanxi are typically taken into account for the

assessments.

Duties/Tariffs: Not applicable.

Notional Assessment: In the absence of business, firm bids and offers to be incorporated into assessment.

Background: Prices series launched Jul 2014.

France

Grade: Urea - granular - 46% N. 90% 2-4 mm

Price basis: FCA from incoming ships or from warehouses.

Credit/Payment terms: Mostly CAD, but LC also used, depending on buyers.



Packaging: bulk

Loading Location: French Bay/Atlantic coast.

Type: Spot. Prices normally fixed via negotiations between Coops/distributors and importers.

Key players are Trammo, Helm, Koch, Gavilon, Ameropa and CMF/ Agrium.

Currency: euro

Weight Unit: metric tonne

Size: Varies; trades for lots of 500 mt up to 5,000 mt are common. Timing: Prompt business up to four weeks ahead; occasionally five

Key Supply Sources: Yara system from northwest Europe. EuroChem from Baltic, NF from Black Sea, Alexfert,

MOPCO, Helwan (HFC), OCI, Egyfert. Occasionally Qafco and CF, but latter rare since Egypt capacity evolved (Middle East and Russian product incur 6.5% duty while Ukraine

is charged 5.5%).

Pricing: Communications with all main contacts including producers, traders and endusers. Key

players are Unifert, Trammo, Fertilore, Ameropa and Helm.

Duties/Tariffs: No import tax except Middle East, Russian and Ukrainian.

Notional assessment: A relatively rare occurrence. Firm offers and bids are used to set a range in the absence

of trading, as are calculations based on confirmed FOB sales in Egypt. FOB Egypt + freight + cost of discharge at average €6-8/mt + misc costs at around €5= FOT breakeven, but

time-lag is often significant. Yara regularly posts prices.

Background: Price series launched May 2006.

UREA GRANULAR CFR

Mediterranean (duty paid)

Grade: Urea - granular - 46% N. 90% 2-4 mm

Price basis: CFR

Credit/Payment terms: Sight LC or deferred payment up to 180 days from BL date

Packaging: bulk

Delivery Location: Turkey, Italy, Spain.

Type: Spot.
Currency: US dollar
Weight Unit: metric tonne

Size: Varies; trades for lots of 5,000 mt up to 20,000 mt are common.

Timing: Prompt business up to five weeks ahead.

Key Supply Sources: Egypt, Ukraine, Russia, including NF Trading and EuroChem, and Middle East. 13
Pricing: Communications with main contacts including producers, traders and endusers. Most

Turkish sales are concluded basis 180 days credit.

Duties/Tariffs: 6.5% tax on Russian plus Middle East and 5.5% on Ukrainian product must be kept in

mind.

Notional assessment: A relatively rare occurrence. Most weeks will have at least one trade, but FOB plus

freight calculations based on prevailing Egyptian FOB price are often used.

Background: Price series launched May 2006.

SE Asia

Grade: Urea - granular - 46% N. 90% 2-4 mm

Price basis: CFR

Credit/Payment terms: Sight LC or deferred payment up to 90 days.

Packaging: bulk

Delivery Location: Thailand, Taiwan, South Korea, Philippines

Type: Mainly contract business, but spot trades also rather frequent.

Currency: US dollar Weight Unit: metric tonne

Size: Varies; trades for lots of 5,000 mt up to 20,000 mt are common.

Timing: Prompt business up to five weeks ahead. Key Supply Sources: Middle East, China, Malaysia, Indonesia



Pricing: Communications with main contacts including producers, traders and endusers. Contract

prices in Thailand and Philippines are fixed via formulae. Spot business via negotiations.

Thailand a key market.

Duties/Tariffs: None except for Chinese export taxes

Notional assessment: A relatively rare occurrence. Most weeks will have at least one trade, but FOB plus

freight calculations based on prevailing Middle East and Chinese FOB prices are often

used.

Background: Price series launched April 2004.

South Korea

Grade: Urea - granular - 46% N - in bulk. 90% 2-4 mm

Price basis: CFR

Credit/Payment terms: Sight LC or deferred payment up to 90 days.

Packaging: bulk

Delivery Location: Main Korean ports

Type: Mainly contract business, but spot trades also rather frequent, mainly via tenders.

Currency: US dollar Weight Unit: metric tonne

Size: Varies; trades for lots of 5,000 mt up to 20,000 mt are common.

Timing: Prompt business up to five weeks ahead. Key Supply Sources: Middle East, China, Malaysia, Indonesia

Pricing: Communications with main contacts including producers, traders and endusers. Contract

prices with Middle East and Malaysia are fixed via formulae. Spot business via

negotiations. Thailand a key market.

Duties/Tariffs: None except for Chinese export taxes

Notional assessment: A relatively frequent occurrence. Most weeks will have no spot trades, so FOB plus

freight calculations based on prevailing Middle East and Chinese FOB prices are often

used. Regularly labelled 'No recent business'.

Background: Price series launched July 2005.

Brazil

Grade: Urea - granular - 46% N. 90% 2-4 mm

Price basis: CFR
Credit/Payment terms: Sight LC
Packaging: bulk

Delivery Location: All main Brazilian ports with emphasis on Santos and Paranagua.

Type: Spot and formulae contracts. Producers and traders regularly load vessels on

speculation, and sell these piecemeal to numerous importers while ships are en-route

and/or awaiting turn to discharge.

Currency: US dollar Weight Unit: metric tonne

Size: Varies; trades for lots of 5,000 mt up to 35,000 mt are common. Larger cargoes the

exception.

Timing: Mostly spot business, prompt up to five weeks ahead.

Key Supply Sources: Middle East, China, Trinidad, Venezuela, FSU and Indonesia.

Pricing: Communications with main contacts, particularly endusers and traders. Middle East

prices are set via formulae, generally based on average of FOB Middle East plus freight as

assessed on Bill of Lading date and on date of arrival in Brazil.

Duties/Tariffs: No import duties.

Notional assessment: Relatively common. FW updates prices when sales are concluded, but also regularly

calculate delivered cost basis prevailing Middle East FOB numbers plus freight for indicative CFR value. Bid/ offer spread occasionally used to assess figure when market is

active, but no sales are concluded in week.

Background: Price series launched November 2013.



UREA GRANULAR DEL

US Northern Plains

Grade: Granular 46-0-0

Price basis: DEL

Credit/Payment terms: Cash/sight 14

Packaging: bulk

Delivery Location: Warehouses in North Dakota, South Dakota and Northwest Minnesota.

Type: Spot
Currency: US dollar
Weight Unit: short ton
Size: Typically 100 st

Timing: Prompt business generally calls for Loading Location within two weeks. Key Supply Sources: Product is distributed by US and Canadian producers mostly by rail.

Pricing: Business reported by producers, traders, distributors and retailers. Most product enters

the region by rail.

Duties/Tariffs: Not applicable

Notional Assessment: Bid and offer spreads between distributors and retailers or other suppliers can be useful

in the absence of spot business for at least two weeks.

Background: Price series launched July 1990.

US California

Grade: Granular 46-0-0

Price basis: DEL
Credit/Payment terms: Cash/sight
Packaging: bulk

Delivery Location: Distributors outside of Stockton CA, Stockton CA and Long Beach CA.

Type: Spot
Currency: US dollar
Weight Unit: short ton
Size: Typically 100 st.

Timing: Prompt business generally calls for Loading Location within two weeks.

Key Supply Sources: Product is distributed from ports on the coast or from arrivals by rail primarily from

Canada.

Pricing: Business reported by producers, traders, distributors and retailers. Most product enters

the region from imported cargos or by rail before being distributed by rail and truck.

Prices tend to remain fixed through application seasons.

Duties/Tariffs: Not applicable

Notional Assessment: Bid and offer spreads between distributors and retailers or other suppliers can be useful

in the absence of spot business for at least two weeks.

Background: Price series launched July 1990.

US Pacific NW

Grade: Granular 46-0-0

Price basis: DEL
Credit/Payment terms: Cash/sight
Packaging: bulk

Delivery Location: Product is distributed by rail in Washington, Oregon and the Idaho panhandle.

Type: Spot
Currency: US dollar
Weight Unit: short ton
Size: Typically 100 st.

Timing: Prompt business generally calls for Loading Location within two weeks.

Key Supply Sources: Urea generally originates in Alberta, Canada, Portland OR and US inland plants west of

the Mississippi River.

Pricing: Business reported by producers, traders, distributors and retailers. Most product enters

the region by rail. Prices tend to remain fixed through application seasons.

Duties/Tariffs: Not applicable



Bid and offer spreads between distributors and retailers or other suppliers can be useful Notional Assessment:

in the absence of new business for at least two weeks.

Background: Price series launched June 2000.

Canada West

Grade: Granular 46-0-0

Price basis: DEL Credit/Payment terms: Cash/sight bulk Packaging:

Alberta and points west **Delivery Location:**

Type: Spot.

Canadian dollar Currency: Weight Unit: metric ton Size: 80-90 mt

Prompt business generally calls for loading within two weeks. Timing:

Key Supply Sources: Almost exclusively plants in western Canada and imports through the St. Lawrence

Seaway and Halifax.

Price lists from producers plus reports from distributors and importers. Prices can hold at Pricing:

a fixed level for three-four months between applications windows.

Duties/Tariffs: Not applicable

Notional Assessment: Bid and offer spreads between distributors and retailers or other suppliers can be useful.

Background: Price series launched August 2002.

UAN - FOB

Black Sea 32%

Grade: 32-0-0 Price basis: FOB

Credit/Payment terms: At sight via transfer or LC. Often prepayment for Russia and Ukraine.

Packaging:

Loading Location: Novorossiysk for FSU, Constanza for Romania.

Spot Type: Currency: **US** dollar Weight Unit: metric tonne 15-30,000 mt Size: Timing: Up to 30 days forward

Main Consumer Markets: USA, France, Benelux, Argentina

Duties/Tariffs: Romanian product enters EU free of duty. Russia pays 6.5%, Ukraine duty is 5.5%. Pricing: An important price-point as encompasses Romanian, Russian and Ukrainian exports.

Assessments are based on information collected from sellers and buyers. Producers are Interagro and Ameropa/Azomures for Romania. EuroChem for Russia, Group DF for

Ukraine.

Notional Assessment: A rare occurrence. A week hardly ever passes with any trades. Netback calculations on

> confirmed CFR sales are used to calculate FOB values. In the absence of business, firm bids and offers to be incorporated into assessment if two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent Business" may be applied if no firm bids or offers. A "no market" with null values is posted with four weeks or more of

market inactivity.

Background: Price series launched August 2001.

Baltic

Grade: 32-0-0 FOB Price basis:

Credit/Payment terms: At sight via transfer or LC. Often prepayment for Russia and Belarus.

Packaging: bulk



Loading Location: Klaipeda for Grodno, Achema and EuroChem.

Type: Spot
Currency: US dollar
Weight Unit: metric tonne
Size: 5-30,000 mt

Timing: Up to 30 days forward

Main Consumer Markets: USA, Germany, France, Benelux, Argentina

Duties/Tariffs: Estonian product enters EU free of duty. Russia and Belarus pays 6.5%.

Pricing: An important price-point as encompasses Estonian, Russian and Belarus exports.

Assessments are based on information collected from sellers and buyers. Producers are: Achema for Estonian, EuroChem for Russia, Grodno for Belarus. Grodno regularly sells

via tenders.

Notional Assessment: A rare occurrence. A week hardly ever passes with any trades. Netback calculations on

confirmed CFR sales are used to calculate FOB values. In the absence of business, firm bids and offers to be incorporated into assessment if two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent Business" may be applied if no firm bids or offers. A "no market" with null values is posted with four weeks or more of

market inactivity.

Background: Price series launched January 2013.

China 32% Spot

Grade: 32-0-0 Price basis: FOB

Credit/Payment terms: At sight via transfer or LC. Often prepayment for Russia and Ukraine.

Packaging: bulk

Loading Location: Range of ports in China

Type: Spot
Currency: US dollar
Weight Unit: metric tonne
Size: 3-30,000 mt
Timing: 30-45 days forward
Main Consumer Markets: Argentina, Mexico, US
Duties/Tariffs: Export tax zero for 2018

Pricing: Reflects producer sales including from Jinkai and Anhui Huaihua.

Notional Assessment: Has been no market since January 2018. Background: Price series launched September 2016.

Egypt 32% Spot

Grade: 32-0-0 liquid Price basis: FOB

Credit/Payment terms: At sight via transfer or LC, depending on buyers' credit-standing

Packaging: bulk
Loading Location: Damietta
Type: Spot
Currency: US dollar
Weight Unit: metric tonne
Size: 3-30,000 mt

Timing: Up to 30 days forward

Main Consumer Markets: USA, Germany, France, Benelux, Argentina Duties/Tariffs: Egyptian product enters EU free of duty.

Pricing: An important price-point as encompasses Egyptian exports. Assessments are based on

information collected from sellers and buyers. Main producers are: Abu Qir and

Liquifert/Polyserve. Abu Qir regularly sells via tenders.

Notional Assessment: A rare occurrence. A week hardly ever passes without any trades. Netback calculations

on confirmed CFR sales are used to calculate FOB values. In the absence of business, firm bids and offers to be incorporated into assessment if two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent Business" may be applied if no firm



bids or offers. A "no market" with null values is posted with four weeks or more of

market inactivity.

Background: Price series launched January 2016 "No Recent Business" may be applied if no firm bids

or offers. A "no market" with null values is posted with four weeks or more of market

inactivity.

US Midwest

Grade: 32-0-0 and 28-0-0

Price basis: FOB
Credit/Payment terms: Cash/sight.

Loading: River terminals and inland terminals primarily in Illinois, Indiana, Ohio, Iowa, Nebraska,

Missouri and Kentucky.

Type: Spot Currency: US dollar

Weight Unit: units per short tons Size: Typically 25 st

Timing: Prompt business generally calls for pickup within two weeks. 16

Key Supply Sources: Product is railed by producers in the US, East Coast ports and Canada, or barged from the

US Gulf from overseas plants.

Duties/Tariffs: Not applicable.

Pricing: Reflects trade between producers, traders and distributors. The largest players include,

but are not limited to, Merschmann's, Brandts, CF, Yara, Agrium, Trammo, Helm, United and The Andersons. UAN generally is the primary source of nitrogen in the region,

followed by ammonia and urea.

Notional Assessment: In the absence of business, firm bid and offer spreads between distributors and retailers

or other suppliers to be incorporated into assessment if two weeks of market inactivity.

Background: Most product enters the region by barge or rail as 32% solution, before being distributed

by the truckload usually as 28% solution. Price series launched July 2002.

US Midwest East

Grade: 32-0-0 and 28-0-0

Price basis: FOB
Credit/Payment terms: Cash/sight.

Loading: River terminals and inland terminals primarily in Illinois, Indiana, Ohio, Michigan and

Kentucky.

Type: Spot Currency: US dollar

Weight Unit: units per short tons Size: Typically 25 st.

Timing: Prompt business generally calls for pickup within two weeks.

Key Supply Sources: Product is railed by producers in the US, East Coast ports and Canada, or barged from the

US Gulf from overseas plants.

Duties/Tariffs: Not applicable.

Pricing: Reflects trade between producers, traders and distributors. The largest players include,

but are not limited to, Merschmann's, Brandts, CF, Yara, Trammo, Helm and The Andersons. UAN generally is the primary source of nitrogen in the region, followed by

ammonia and urea.

Notional Assessment: In the absence of business, firm bid and offer spreads between distributors and retailers

or other suppliers to be incorporated into assessment if two weeks of market inactivity.

Background: Most product enters the region by barge or rail as 32% solution, before being distributed

by the truckload usually as 28% solution. Price series launched July 1990.

US Midwest West

Grade: 32-0-0 and 28-0-0

Price basis: FOB
Credit/Payment terms: Cash/sight.



Loading: River terminals and inland terminals primarily in Iowa, Missouri, Nebraska, Eastern

Kansas and Minnesota.

Type: Spot Currency: US dollar

Weight Unit: units per short tons Size: Typically 25 st.

Timing: Prompt business generally calls for pickup within two weeks.

Key Supply Sources: Product is railed by producers in the US and Canada, or barged from the US Gulf from

overseas plants.

Duties/Tariffs: Not applicable.

Pricing: Reflects trade between producers, traders and distributors. The largest players include,

but are not limited to, Merschmann's, CF, Yara, Agrium, Trammo, Helm and United. UAN generally is the primary source of nitrogen in the region, followed by ammonia and urea. In the absence of business, firm bid and offer spreads between distributors and retailers

or other suppliers to be incorporated into assessment if two weeks of market inactivity.

Most product enters the region by barge or rail as 32% solution, before being distributed

by the truckload usually as 28% solution. Price series launched July 1990.

US East Coast 32%

Notional Assessment:

Background:

Grade: 32-0-0
Price basis: FOB
Credit/Payment terms: Cash/sight.

Loading: East Coast terminals and the PotashCorp plant at Augusta GA.

Type: Spot Currency: US dollar

Weight Unit: units per short tons

Size: Typically 25 st trucks or 100 st rail cars.

Timing: Prompt business generally calls for pickup within two weeks.

Key Supply Sources: Ports on the East Coast and the PotashCorp plant at Augusta GA.

Duties/Tariffs: Not applicable.

Pricing: Reflects trade between importers and US suppliers, plus producer price lists. Much of the

UAN- 32 movement from the East Coast is destined for the Midwest, but the truck

market is active at the same times of year for the local markets.

Notional Assessment: In the absence of business, firm bid and offer spreads between distributors and retailers

or other suppliers to be incorporated into assessment if two weeks of market inactivity.

Background: Unlike the Midwest, most truck distribution is in 32% concentration, but pricing still

often quoted in units of N by market players. Price series launched July 1990. 17

US Pacific NW

Grade: 32-0-0 and 28-0-0

Price basis: FOB
Credit/Payment terms: Cash/sight.

Delivery Locations: Terminals on the coast and inland in Washington, Oregon and the Idaho panhandle.

Type: Spot Currency: US dollar

Weight Unit: units per short tons

Size: Typically 25 st trucks or 100 st rail cars.

Timing: Prompt business generally calls for pickup within two weeks.

Key Supply Sources: Primarily rail shipments from Canada and US producers to truck distributors.

Duties/Tariffs: Not applicable.

Pricing: Reflects trade between importers and US suppliers, plus producer price lists. Much of the

UAN- 32 movement from the East Coast is destined for the Midwest, but the truck

market is active at the same times of year for the local markets.

Notional Assessment: In the absence of business, higher bids from endusers or lower offers from suppliers may

be incorporated into assessment after two weeks of market inactivity.

Background: Unlike the Midwest, most truck distribution is in 32% concentration, but pricing still

often quoted in units of N by market players. Price series launched July 1990.



US Southern Plains

Grade: 32-0-0 and 28-0-0

Price basis: FOB
Credit/Payment terms: Cash/sight.

Loading: River terminals and inland terminals primarily in Arkansas, Oklahoma, Texas and western

Kansas.

Type: Spot Currency: US dollar

Weight Unit: units per short tons Size: Typically 25 st.

Timing: Prompt business generally calls for pickup within two weeks.

Key Supply Sources: Product is railed by producers in the US, East Coast ports and Canada, or barged from the

US Gulf from overseas plants.

Pricing: Reflects business concluded by distributors, plus CF Industries and Agrium. UAN

generally is the primary source of nitrogen in the region, followed by ammonia and urea.

Duties/Tariffs: Not applicable.

Notional Assessment: In the absence of business, bid and offer spreads between distributors and retailers or

other suppliers to be incorporated into assessment if two weeks of market inactivity.

Background: Most product enters the region by barge or rail as 32% solution, before being distributed

by the truckload usually as 28% solution. Price series launched July 1990.

US New Orleans barge 32%

Grade: 32-0-0
Price basis: FOB
Credit/Payment terms: Cash/sight.

Loading: Barges and railcars in the US Gulf.

Type: Spot
Currency: US dollar
Weight Unit: short ton
Size: 1,500 st

Timing: Prompt business generally calls for pickup within two weeks. Key Supply Sources: US plants and imports from Trinidad, the FSU and Europe.

Pricing: Reflects trade between importers, up river distributors, plus producer price lists.

Duties/Tariffs: Not applicable

Notional Assessment: In the absence of business, higher bids from endusers or lower offers from suppliers may

be incorporated into assessment after two weeks of market inactivity.

US New Orleans barge

Grade: 32-0-0
Price basis: FOB
Credit/Payment terms: Cash/sight.

Loading: Barges and railcars in the US Gulf.

Type: Spot Currency: US dollar

Weight Unit: units per short tons Size: 1,500 st and 100 st.

Timing: Prompt business generally calls for pickup within two weeks.

Key Supply Sources: CF plants at Donaldsonville and imports from Trinidad and rarely from Europe.

Pricing: Reflects trade between importers, up river distributors, plus producer price lists. Much

of the UAN- 32 movement from the East Coast is destined for the Midwest, but the truck

market is active at the same times of year for the local markets.

Duties/Tariffs: Not applicable

Notional Assessment: In the absence of business, higher bids from endusers or lower offers from suppliers may

be incorporated into assessment after two weeks of market inactivity.

Background: UAN barges never move north from the US Gulf in volumes of less than 9-10,000 st, with

all barges making the entire trip north and south. Price series launched January 1998. 18



UAN - FCA

Germany 28%

Grade: 28-0-0 Price basis: FCA ex tank.

Credit/Payment terms: Sight payment, normally via simple bank transfer

Packaging: bulk
Loading Location: Hamburg
Type: Spot
Currency: euro

Weight Unit: metric tonne

Size: Truckloads to barge-loads (25 mt – 1,500 mt)

Timing: Two-four weeks, except in May-June when 30- 45 days forward prices for 'new season'

are used.

Key Supply Sources: Estonia, Belarus, Russia, Netherlands

Duties/Tariffs: EU duty free. Russia and Belarus pays 6.5% duty.

Pricing: Assessments are based on information collected from regional producers, sellers and

buyers. Key players are Yara, AgroBaltic, Witt and Helm.

Notional Assessment: Netback calculations on confirmed regional FOB sales of 32% UAN are used to calculate

FCA values for 28% UAN. In the absence of business, firm bids and offers to be incorporated into assessment if two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent Business" may be applied if no firm bids or offers. A "no market" with null values is posted with four weeks or more of market inactivity.

Background: Price series launched May2006.

Rouen 30%

Grade: 30-0-0
Price basis: FCA ex tank.

Credit/Payment terms: Sight payment, normally via simple bank transfer

Packaging: bulk
Loading Location: Rouen
Type: Spot
Currency: euro

Weight Unit: metric tonne

Size: Truckloads to barge-loads (25 mt – 1,500 mt)

Timing: Two-four weeks, except in May-June when 30- 45 days forward prices for 'new season'

are used.

Key Supply Sources: Egypt, Estonia, Belarus, Russia, Poland, Netherlands, Romania, Russia and Ukraine.

Occasional supply from the US.

Duties/Tariffs: EU, Egypt, Romania and Estonia duty free. Russia and Belarus pay 6.5% duty, Ukraine

pays 5.5%.

Pricing: Assessments are based on information collected from regional producers, sellers and

buyers. Key players are Yara, Koch, Helm, Unifert, CHS, Agrium. Contacts maintained

with producers as identified in Baltic and Black Sea sections.

Notional Assessment: Netbacks on confirmed regional FOB sales of 32% UAN are used to calculate FCA values

for 30% UAN. In the absence of business, firm bids and offers to be incorporated into assessment if two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent Business" may be applied if no firm bids or offers. A "no market" with null values

is posted with four weeks or more of market inactivity.

Background: Price series launched October 1993.

UAN - CFR

US East Coast 32%

Grade: 32-0-0
Price basis: CFR
Credit/Payment terms: Cash/sight.

Delivery Location: Ports from Philadelphia PA to Savannah GA.



Type: Spot
Currency: US dollar
Weight Unit: metric tonne
Size: 18-25,000 mt.

Timing: Prompt business generally calls for discharge from 30-45 days. Key Supply Sources: Western and Eastern Europe, the FSU, Egypt and Trinidad.

Pricing: Reflects trade between importers and US suppliers, plus producer price lists. Much of the

UAN- 32 movement from the East Coast is destined for the Midwest, but the truck

market is active at the same times of year for the local markets.

Duties/Tariffs: Not applicable.

Notional Assessment: In the absence of business, higher bids from endusers or lower offers from suppliers may

be incorporated into assessment after two weeks of market inactivity.

Background: Unlike the Midwest, most truck distribution is in 32% concentration, but pricing still

often quoted in units of N by market players. Price series launched March 2006.

UAN - CFR

Argentina

Grade: 32-0-0
Price basis: CFR
Credit/Payment terms: Cash/sight.

Delivery Location: Bahia Blanca, Necochea, San Nicolas

Type: Spot
Currency: US dollar
Weight Unit: metric tonne
Size: 18-27,000 mt.

Timing: Prompt business generally calls for discharge from 30-45 days.

Key Supply Sources: US, Baltic, Black Sea

Pricing: Reflects trade between importers, traders and overseas producers.

Duties/Tariffs: Not applicable.

Notional Assessment: In the absence of business, higher bids from endusers or lower offers from suppliers may

be incorporated into assessment after two weeks of market inactivity.

Background: Price series launched in September 2016.

UAN - DEL

US California

Grade: 32-0-0 and 28-0-0

Price basis: DEL Credit/Payment terms: Cash/sight.

Delivery Locations: Terminals on the coast and inland in California. 19

Type: Spot Currency: US dollar

Weight Unit: units per short ton

Size: 25 st trucks or 100 st rail cars.

Timing: Prompt business generally calls for pickup within two weeks.

Key Supply Sources: Primarily rail shipments from Canada and US producers.

Pricing: Communications with importers and US suppliers, plus producer price lists. Almost all of

the product movement is handled by rail cars, many of which have to act as storage for

distributors due to a lack of tank space.

Duties/Tariffs: Not applicable

Notional Assessment: In the absence of business, higher bids from endusers or lower offers from suppliers may

be incorporated into assessment after two weeks of market inactivity.

Background: Unlike the Midwest, most truck distribution is in 32% concentration, but pricing still

quoted in units of N by market players. Price series launched July 1990.



AS - FOB STEEL

Black Sea

Grade: 21-0-0 Price basis: FOB

Credit/Payment terms: Prepayment or sight LC.

Packaging: bulk
Loading Location: Kherson
Type: Spot
Currency: US dollar
Weight Unit: metric tonne
Size: 3-15,000 mt

Timing: Up to 30 days forward Main Consumer Markets: Turkey, Brazil, Egypt

Duties/Tariffs: Russia pays 6.5% into Turkey and EU. Ukraine is duty free since January 1, 2014.

Pricing: A relatively important price-point as it encompasses raw-material grade supply to

industrial users. Assessments are based on information collected from sellers and buyers. Steel producers such as Evraz are main suppliers. Key buyers are producers such as Toros in Turkey and numerous trading companies with whom weekly contact is

maintained.

Notional Assessment: A relatively rare occurrence. A week hardly ever passes with any trades. Netback

calculations on confirmed CFR sales are used to calculate FOB values. In the absence of business, firm bids and offers to be incorporated into assessment if two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent Business" may be applied if no firm bids or offers. A "no market" with null values is posted with four weeks or more

of market inactivity.

Background: Price series launched September 2000.

AS - FOB CAPROLACTAM

Black Sea

Grade: 21-0-0 Price basis: FOB

Credit/Payment terms: Prepayment or sight LC

Packaging: bulk

Loading Location: TIS terminal, Yuzhnyy

Type: Spot
Currency: US dollar
Weight Unit: metric tonne
Size: 3-35,000 mt

Timing: Up to 30 days forward

Main Consumer Markets: Turkey, Brazil, Indonesia, Mexico
Duties/Tariffs: FSU pays 6.5% into Turkey and EU.

Pricing: A relatively important price-point as it encompasses caprolactam grade supply to

industrial users. Assessments are based on information collected from sellers and buyers. Main producers are Kemerovo/ SBU and Schekino from Russia and Cherkassy from Ukraine. Key buyers are producers such as Toros in Turkey, the Group of Importers in Mexico, Brazilian importers and numerous trading companies with whom weekly

contact is maintained.

Notional Assessment: A relatively rare occurrence. A week hardly ever passes with any trades. Netback

calculations on confirmed CFR sales are used to calculate FOB values. In the absence of business, firm bids and offers to be incorporated into assessment if two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent Business" may be applied if no firm bids or offers. A "no market" with null values is posted with four weeks or more

of market inactivity.

Background: Price series launched September 2000.

China



Grade: 21-0-0 Price basis: FOB

Credit/Payment terms: Mainly sight LC

Packaging: bulk and bagged (Bagged mainly for Vietnam)

Loading locations: Any main port in China

Type: Spot
Currency: US dollar
Weight Unit: metric tonne
Size: 2.0 million mt

Timing: Prompt business up to four weeks ahead; occasionally five.

Main buyers: Indonesia, Vietnam, Malaysia, Philippines, occasionally Turkey and Brazil 20

Duties/Tariffs: None

Pricing: A relatively important price-point given the amount of trade. Assessments are based on

information collected from sellers and buyers. Key buyers are Gresik in Indonesia, Vietnamese and Philippine importers, plus numerous trading companies with whom weekly contact is maintained. Main producers include Sinopec, Zhejiang Huiluoli and

Sinofert.

Notional Assessment: A relatively rare occurrence. Netback calculations on confirmed CFR sales are used to

calculate FOB values. In the absence of business, firm bids and offers to be incorporated into assessment if two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent Business" may be applied if no firm bids or offers. A "no market" with null

values is posted with four weeks or more of market inactivity.

Background: Price series launched November 2013

AS - CFR CAPROLACTAM

Southeast Asia

Grade: 21-0-0 Price basis: CFR

Credit/Payment terms: At sight via transfer or LC, occasionally 30 days credit in Indonesia

Packaging: bulk

Delivery Locations: Indonesia, Vietnam, Taiwan, Philippines

Type: Spot
Currency: US dollar
Weight Unit: metric tonne
Size: 3-25,000 mt

Timing: Up to 30 days forward Main Suppliers: China, South Korea, FSU

Duties/Tariffs: None

Pricing: A relatively important price-point as it encompasses caprolactam grade supply to

industrial users and direct application use. Assessments are based on information collected from sellers and buyers. Key buyers are Gresik in Indonesia, Vietnamese, Philippine and Taiwanese importers plus numerous trading companies with whom weekly contact is maintained. Main producers are CaproCorp from South Korea, Sinopec

from China and Kemerovo/Samsung from the FSU.

Notional Assessment: A relatively rare occurrence. Netback calculations on confirmed FOB sales are used to

calculate CFR values. In the absence of business, firm bids and offers to be incorporated into assessment if two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent Business" may be applied if no firm bids or offers. A "no market" with null

values is posted with four weeks or more of market inactivity.

Background: Price series launched January 2013.

Brazil

Grade: 21-0-0 Price basis: CFR

Credit/Payment terms: Mainly sight LC

Packaging: bulk



Delivery Locations: Paranaguá, Vitória, Santos, Rio Grande

Type: Spot or contract Currency: US dollar Weight Unit: metric tonne

Size: 1.7 million mt of all grades

Timing: Prompt business up to four weeks ahead; occasionally five.

Main Suppliers: Belgium, Russia

Duties/Tariffs: None

Pricing: Prices are derived from sales made into Brazil from Europe and/or Russia and from

purchases made by Brazilian buyers

Notional Assessment: In the absence of confirmed trades, an indicative price may be applied based on the

Black Sea FOB caprolactam grade AS price plus freight assessed basis prevailing time-charter rates. In the absence of business, firm bids and offers to be incorporated into assessment if two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent Business" may be applied if no firm bids or offers. A "no market" with null values

is posted with four weeks or more of market inactivity.

Background: Price series launched November 2013

AS - FOB

US New Orleans

Grade: Granular
Price basis: FOB
Credit/Payment terms: Cash/sight
Loading: Barge or rail
Type: Spot
Currency: US dollar
Weight Unit: short ton

Size: 1,500 st or 100 st

Timing: Prompt business generally refers to product to be available to buyer within two weeks.

Main Consumer Markets: River terminals along the Mississippi, Arkansas,

Pricing: Values represent reports from distributors and other suppliers of spot sales to end users

(retailers). Producer price lists to retailers may also be taken into account when

available.

Duties/Tariffs: N/A

Notional Assessment: In the absence of business, higher bids from end users or lower offers from suppliers

may be incorporated into assessment after two weeks of market inactivity. However,

between peak demand price may be posted as "no market".

Background: Price series launched November 2017.

US Midwest

Grade: Granular and crystal

Price basis: FOB
Credit/Payment terms: Cash/sight

Loading: Warehouses on both sides of the Mississippi River

Type: Spot
Currency: US dollar
Weight Unit: short ton
Size: 25 st

Timing: Prompt business generally refers to product to be delivered within two weeks.

Main Consumer Markets: Endusers on both sides of the Mississippi River.

Pricing: Business concluded by large distributors, Honeywell and Agrium price lists. Trade

generally limited to fall and spring fill periods.

Duties/Tariffs: Not Applicable



Notional Assessment: In the absence of business, higher bids from endusers or lower offers from suppliers may

be incorporated into assessment after two weeks of market 21 inactivity. However,

between peak demand price may be posted as "no market".

Background: Price series launched July 2002.

Baltic Caprolactam FOB

Grade: 21-0-0 Price basis: FOB

Credit/Payment terms: Prepayment or sight LC

Packaging: bulk

Loading Location: It covers exports of caprolactam grade AS from a range of ports in the Baltic Sea with

suppliers in Belarus, suppliers in Russia, Poland.

Type: Spot
Currency: US dollar
Weight Unit: metric tonne
Size: 5-25,000 mt

Timing: Up to 30 days forward

Main Consumer Markets: Brazil

Duties/Tariffs: FSU pays 6.5% into Turkey and EU.

Pricing: Assessments are based on information collected from sellers and buyers. Main

producers in the region include GrodnoAzot.

Notional Assessment: Netback calculations on confirmed CFR sales are used to calculate FOB values. In the

absence of business, firm bids and offers to be incorporated into assessment if two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent Business" may be applied if no firm bids or offers. A "no market" with null values is posted with

four weeks or more of market inactivity.

Background: Price series launched January 2016.

AN - DEL

Western Canada

Grade: Granular

Price basis: DEL

Credit/Payment terms: Cash/sight

Loading: Rail and truck

Type: Spot

Currency: Canadian dollar Weight Unit: metric ton Size: 90 and 22 mt

Timing: Prompt business generally refers to product to be loaded for delivery within two weeks.

Main Consumer Markets: Alberta, Manitoba and Saskatchewan

Pricing: Values represent reports from distributors and other suppliers of spot sales to endusers

(retailers). Producer price lists to retailers may also be taken into account when

available.

Duties/Tariffs: N/A

Notional Assessment: In the absence of business, higher bids from endusers or lower offers from suppliers may

be incorporated into assessment after two weeks of market inactivity. However,

between peak demand price may be posted as "no market".

Background: Price series launched November 2017

AN - FOB

Black Sea

Grade: 34-0-0 Price basis: FOB



Credit/Payment terms: Prepayment or sight LC

Packaging: bulk

Loading Location: Nikolaev and Tuapse/Novorossiysk for FSU. Constanza for Romania.

Type: Spot
Currency: US dollar
Weight Unit: metric tonne
Size: 3-35,000 mt

Timing: Up to 30 days forward

Main Consumer Markets: Turkey, Brazil, Morocco, Central America. USA from Romania and Georgia.

Duties/Tariffs: Russia pays 6.5% into Turkey. Ukraine pays 5.5% into EU and Turkey. Russia is blocked in

USA and EU on antidumping measures except for select producers. Ukraine so far also

blocked into US, but this may change shortly.

Pricing: A relatively important price-point as it encompasses supply from Romania, Georgia

Russia and Ukraine. Assessments are based on information collected from sellers and buyers. Main producers are EuroChem and Uralchem from Russia and Group DF from Ukraine. Interagro and Azomures/Ameropa from Romania. NF Trading and Dreymoor as marketers of Ukrainian and Georgian product. Key buyers are producers such as

Gubretas and Toros in Turkey, the Group of Importers in Mexico, Brazilian importers and

numerous trading companies with whom weekly contact is maintained.

Notional Assessment: A relatively rare occurrence. A week hardly ever passes with any trades. Netback

calculations on confirmed CFR sales are used to calculate FOB values. In the absence of business, firm bids and offers to be incorporated into assessment if two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent Business" may be applied if no firm bids or offers. A "no market" with null values is posted with four weeks or more

of market inactivity.

Background: Price series launched May 2000.

Baltic

Grade: 34-0-0 Price basis: FOB

Credit/Payment terms: Prepayment or sight LC

Packaging: bulk

Loading Location: Klaipeda, St. Petersburg and Kotka.

Type: Spot
Currency: US dollar
Weight Unit: metric tonne
Size: 3-25,000 mt

Timing: Up to 30 days forward

Main Consumer Markets: Brazil, Argentina, Mexico, Egypt, Tunisia, Morocco, Central America.

Duties/Tariffs: Russia and Belarus pays 6.5% into Turkey. Russia blocked in USA and EU on antidumping

measures. Belarus unable to the enter the US due to US trade restrictions.

Pricing: A relatively important price-point as it encompasses supply from Estonia, Russia and

Belarus. Assessments are based on information collected from sellers and buyers. Main producers are EuroChem and Uralchem from Russia and Grodno from Belarus. Key buyers are the Group of Importers in Mexico, Incofe in Central America, Brazilian importers and numerous trading companies with whom weekly contact is maintained.

Notional Assessment: A relatively rare occurrence. A week hardly ever passes with any trades. Netback

calculations on confirmed CFR sales are used to calculate FOB values.In the absence of business, firm bids and offers to be incorporated into assessment if two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent Business" may be applied if no firm bids or offers. A "no market" with null values is 22 posted with four weeks or

more of market inactivity.

Background: Price series launched July 2004.

US Midwest

Grade: 34-0-0
Price basis: FOB
Credit/Payment terms: Cash/sight.



Loading: Truckloads from river terminals and inland warehouses across the region, but most

activity in Iowa, Nebraska and Eastern Kansas.

Type: Spot
Currency: US dollar
Weight Unit: short ton
Size: Typically 25 st

Timing: Prompt business generally calls for pickup within two weeks.

Key Supply Sources: Product is railed to distributors' warehouses by producers in the US and Canada, or from

the US Gulf.

Pricing: Business concluded by producers, traders and distributors. AN is the primary choice for

nitrogen for use on pasture ground.

Duties/Tariffs: Not applicable

Notional Assessment: In the absence of business, bid and offer spreads between distributors and retailers or

other suppliers to be incorporated into assessment if two weeks of market inactivity.

Background: Most product enters the region by barge or rail, before being distributed by the

truckload. Price series launched April 1991.

US Southern Plains

Grade: 34-0-0
Price basis: FOB
Credit/Payment terms: Cash/sight.

Loading: Truckloads from river terminals and inland warehouses across Arkansas, Oklahoma,

Texas and western Kansas.

Type: Spot
Currency: US dollar
Weight Unit: short ton
Size: Typically 25 st.

Timing: Prompt business generally calls for pickup within two weeks.

Key Supply Sources: Product is railed to distributors' warehouses primarily by producers in the US and from

the US Gulf.

Pricing: Business concluded by producers, traders and distributors. AN is the primary choice for

nitrogen for use on pasture ground.

Duties/Tariffs: Not applicable

Notional Assessment: In the absence of business, bid and offer spreads between distributors and retailers or

other suppliers to be incorporated into assessment if two weeks of market inactivity.

Background: Most product enters the region by barge, before being distributed by the truckload. Price

series launched October 1999.

US South East

Grade: 34-0-0
Price basis: FOB
Credit/Payment terms: Cash/sight.

Loading: Railcars from US plants, the US Gulf and sometimes Tama FL.

Type: Spot
Currency: US dollar
Weight Unit: short ton
Size: 100 st.

Timing: Prompt business generally calls for pickup within two weeks.

Key Supply Sources: Product is railed to distributors' warehouses primarily by producers in the US and from

the US Gulf.

Pricing: Business concluded by producers, traders and distributors. AN is the primary choice for

nitrogen for use on pasture ground.

Duties/Tariffs: Not applicable

Notional Assessment: In the absence of business, bid and offer spreads between distributors and retailers or

other suppliers to be incorporated into assessment if two weeks of market inactivity.

Background: While urea is the most common source of nitrogen, AN is heavily used in the region and

some crops rely on AN. Price series launched April 2005.



US New Orleans

Grade: 34-0-0
Price basis: FOB
Credit/Payment terms: Cash/sight.

Loading: Barges from cargo vessels.

Type: Spot
Currency: US dollar
Weight Unit: short ton

Size: Typically 1,500 st.

Timing: Prompt business generally calls for pickup within two weeks.

Key Supply Sources: Overseas producers primarily in Europe and the FSU.

Pricing: Business concluded by importers, traders, distributors and retailers.

Duties/Tariffs: Not applicable

Notional Assessment: Notional Assessment: In the absence of business, higher bids from endusers or

lower offers from suppliers may be incorporated into assessment after two weeks of

market inactivity.

Background: In recent years, Georgia has been the 23 primary source of imported AN. Price series

launched February 2003.

AN FCA

UK

Grade: 34-0-0

Price basis: FCA ex vessel or warehouse.

Credit/Payment terms: Sight payment, normally via simple bank transfer

Packaging: Big-Bags

Loading Location: FCA port of import

Type: Spot Currency: euro

Weight Unit: Metric tonne

Size: Truckloads to 5,000 mt contracts.

Timing: Two-four weeks, except in May-June when 30- 45 days forward prices for 'new season'

are used.

Key Supply Sources: Netherlands, Romania, Poland.

Duties/Tariffs: Russia and Belarus would pay 6.5% duty, but antidumping measures prevail. Duty on

Ukraine is 5.5%

Pricing: Assessments are based on information collected from regional producers, sellers and

buyers. Key players are Yara, Gavilon and Agrium. Contacts maintained with eligible producers as identified in Baltic section and numerous traders. Local producer GrowHow

has main market share.

Notional Assessment: Netback calculations on confirmed regional FOB sales are used to calculate FCA values. In

the absence of business, firm bids and offers to be incorporated into assessment if two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent Business" may be applied if no firm bids or offers. A "no market" with null values is posted with

four weeks or more of market inactivity.

Background: Price series launched February 1997.

France

Grade: 34-0-0

Price basis: FCA ex vessel or warehouse.

Credit/Payment terms: Sight payment, normally via simple bank transfer

Packaging: Big-Bags

Loading Location: FCA port of import

Type: Spot
Currency: euro
Weight Unit: Metric tonne

Size: Truckloads to 5,000 mt contracts



Timing: Two-four weeks, except in May-June when 30- 45 days forward prices for 'new season'

are used.

Key Supply Sources: Netherlands, Romania, Poland.

Duties/Tariffs: Russia and Belarus would pay 6.5% duty, but antidumping measures prevail. Duty on

Ukraine is 5.5%.

Pricing: Assessments are based on information collected from regional producers, sellers and

buyers. Key players are Yara, Unifert, Agrium, Unifert. Contacts maintained with eligible producers as identified in Baltic and Black Sea sections and numerous traders. Local producers Yara and GPN have main market share, delivering domestic product in bulk

from production units.

Notional Assessment: Netback calculations on confirmed regional FOB sales are used to calculate FCA values. In

the absence of business, firm bids and offers to be incorporated into assessment if two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent Business" may be applied if no firm bids or offers. A "no market" with null values is posted with

four weeks or more of market inactivity.

Background: Price series launched February 1997.

France

Grade: 34-0-0 Price basis: CPT

Credit/Payment terms: Sight payment, normally via simple bank transfer

Packaging: Bulk

Delivery Location: CPT distributors' warehouse

Type: Spot Currency: euro

Weight Unit: Metric tonne

Size: Truckloads and railcars

Timing: Two-four weeks, except in May-June when 30- 45 days forward prices for 'new season'

are used.

Key Supply Sources: France

Duties/Tariffs: Russia pays 6.5% duty. Ukraine enters duty free.

Pricing: Assessments are based on posted prices by local producers Yara and GPN, duly adjusted

by input from importers and distributors such as key Cooperatives and independent

traders

Notional Assessment: Not applicable. In the absence of business, firm bids and offers to be incorporated into

assessment if two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent Business" may be applied if no firm bids or offers. A "no market" with null values

is posted with four weeks or more of market inactivity.

Background: Price series launched May 2006.

US South

Grade: 34-0-0
Price basis: DEL
Credit/Payment terms: Cash/sigh

Loading: Railcars from US plants, the US Gulf and sometimes Tama FL.

Type: Spot
Currency: US dollar
Weight Unit: short ton
Size: 100 st.

Timing: Prompt business generally calls for pickup within two weeks.

Key Supply Sources: Product is railed to distributors' warehouses primarily by producers in the US and from

the US Gulf.

Pricing: Business concluded by producers, traders and distributors. AN is the primary choice for

nitrogen for use on pasture ground.

Duties/Tariffs: Not applicable

Notional Assessment: In the absence of business, bid and offer spreads between distributors and retailers or

other suppliers to be incorporated into assessment if two weeks of market inactivity.



Background: While urea is the most common source of nitrogen, AN is heavily used in the region and

some crops rely on AN. Price series launched September 2003.

AN - CFR

Brazil

Grade: 34-0-0 Price basis: CFR

Credit/Payment terms: At sight via transfer or LC, occasionally 30-60 days credit, but assessment is made basis

sight payment

Packaging: bulk

Delivery Locations: Main Brazilian ports

Type: Spot
Currency: US dollar
Weight Unit: metric tonne

Size: 5-30,000 mt, with low end based on sales of part cargoes and/or combination shipments

Timing: Up to 30 days forward

Main Suppliers: FSU and Northwest Europe. Main producers are Uralchem, EuroChem, Acron and Group

DF from the FSU plus Yara from NWE

Duties/Tariffs: None

Pricing: Prices are derived from confirmed CFR purchases by Brazilian importers

Notional Assessment: A relatively rare occurrence. Calculations on confirmed FOB sales for other destinations

from FSU and NWE are used to calculate CFR values. In the absence of business, firm bids and offers to be incorporated into assessment if two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent Business" may be applied if no firm bids or offers. A "no market" with null values is posted with four weeks or more of market

inactivity.

Background: Price series launched January 2016

CAN - CIF

Germany Inland Ports Spot

Grade: 27-0-0 Price basis: CIF

Credit/Payment terms: Sight payment, normally via simple bank transfer

Packaging: Bulk

Delivery Location: CIF Inland ports

Type: Spot
Currency: euro
Weight Unit: Metric tonne
Size: 1,500 mt
Timing: Two-four weeks.

Key Supply Sources: Germany, Netherlands, Romania, Poland.
Duties/Tariffs: Russia pays 6.5% duty. Ukraine enters duty free.

Pricing: Assessments are based on posted prices by local producers Yara and OCI duly adjusted by input from importers and

distributors such as key Cooperatives and independent traders.

Notional Assessment: Not applicable. In the absence of business, firm bids and offers to be incorporated into

assessment if two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent Business" may be applied if no firm bids or offers. A "no market" with null values

is posted with four weeks or more of market inactivity.

Background: Price series launched February 1997.

Benelux Inland Ports Spot

Grade: 27-0-0 Price basis: CIF

Credit/Payment terms: Sight payment, normally via simple bank transfer

Packaging: Bulk



Delivery Location: CIF Inland ports

Type: Spot Currency: euro

Weight Unit: Metric tonne
Size: 1,500 mt
Timing: Two-four weeks.

Key Supply Sources: Germany, Netherlands, Poland. Duties/Tariffs: Russia pays 6.5% duty. 25

Pricing: Assessments are based on posted prices by local producers Yara and OCI duly adjusted

by input from importers and distributors such as key Cooperatives and independent

traders.

Notional Assessment: Not applicable. In the absence of business, firm bids and offers to be incorporated into

assessment if two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent Business" may be applied if no firm bids or offers. A "no market" with null values

is posted with four weeks or more of market inactivity.

Background: Price series launched May 2006.

Notional Assessment: A relatively rare occurrence. Netback calculations on confirmed CFR sales are used to

calculate FOB values. In the absence of business, firm bids and offers to be incorporated into assessment if two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent Business" may be applied if no firm bids or offers. A "no market" with null

values is posted with four weeks or more of market inactivity.

Background: Price series launched November 2013.

AMMONIA FOB

Black Sea

Grade: Anhydrous ammonia (82% nitrogen) stored and transported as a fully refrigerated liquid

at -33°C (-28°F).

Price basis: FOB.

Credit/Payment terms: Pre-payment, occasionally sight Letter of Credit.

Packaging: bulk
Loading Location: Yuzhnyy
Type: Spot
Currency: US dollar
Weight Unit: metric tonne

Size: Varies; trades for lots of 4,000 mt up to 40,000 mt are usual. Timing: Prompt business up to four weeks ahead; occasionally five.

Key Supply Sources: Russia and Ukraine

Pricing: Derived from sales concluded by producers in Russia and Ukraine direct or via traders.

Netback calculations on confirmed CFR sales are used to assess pricing in the absence of confirmed FOB sales. Producers are OPZ, DnieproAzot and Group DF in Ukraine. TogliattiAzot/Nitrochem and Group DF' Rossosh are the main suppliers from Russia.

Duties/Tariffs: None for FSU exports; EU charges 2% of CFR value on imports from FSU

Notional assessment: A rare occurrence. A week hardly ever passes with any trades. Netback calculations on

confirmed CFR sales are used to calculate FOB values. Firm bids and firm offers are used in the absence of a confirmed trade. In the absence of business, firm bids and offers to be incorporated into assessment if two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent Business" may be applied if no firm bids or offers. A "no market" with null values is posted with four weeks or more of market inactivity.

Background: Price series launched July 1997.

Baltic Sea

Grade: Anhydrous ammonia (82% nitrogen) stored and transported as a fully refrigerated liquid

at -33°C (-28°F).

Price basis: FOB.

Credit/Payment terms: Pre-payment, occasionally sight Letter of Credit.

Packaging: bulk



Loading Locations: Ventspils and Sillamae

Type: Spot
Currency: US dollar
Weight Unit: metric tonne

Size: Varies; trades for lots of 4,000 mt to 23,500 mt are usual. Timing: Prompt business up to four weeks ahead; occasionally five

Key Supply Sources : Russia and Estonia

Pricing: Derived from sales concluded by producers in Russia and Estonia direct or via traders.

Key suppliers are SBU, Uralchem and Nitrofert/NF Trading.

Duties/Tariffs: None for FSU exports; EU charges 2% on imports from FSU

Notional assessment: Firm offers and bids are used to set a range in the absence of trading. In the absence of

firm bids/offers, a notional premium of \$10/mt above FOB Black Sea FOB prices might be used. In the absence of business, firm bids and offers to be incorporated into assessment if two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent Business" may be applied if no firm bids or offers. A "no market" with null values is

posted with four weeks or more of market inactivity.

Background: Price series launched July 2004.

Middle East

Grade: Anhydrous ammonia (82% nitrogen) stored and transported as a fully refrigerated liquid

at -33°C (-28°F).

Price basis: FOB.

Credit/Payment terms: At sight on buyers' receipt of shipping documents. Occasionally supported by Letter of

Credit, depending on buyers' credit worthiness.

Packaging: bulk

Loading Location: Saudi Arabia: Jubail and Ras Al- Khair; Iran: BIK and Assaluyeh; Qatar:

Mesaieed; UAE: Ruwais; Kuwait: Shuaiba; Bahrain: Sitra; Oman: Sur. 26

Type: Spot
Currency: US dollar
Weight Unit: metric tonne

Size: Varies; trades for lots of 4,000 mt to 23,500 mt are usual.

Timing: Prompt business up to four weeks ahead; occasionally five.

Key Supply Sources: Middle East producers, per above.

Pricing:Derived from sales concluded by producers in the Middle East direct or via traders.

Duties/Tariffs: None.

Notional Assessment: Firm offers and bids are used to set a range in the absence of confirmed deals. Spot CFR

sales in India from other supply sources will be used for netback calculations in the absence og Middle East spot sales. In the absence of business, firm bids and offers to be incorporated into assessment if two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent Business" may be applied if no firm bids or offers. A "no market" with null values is posted with four weeks or more of market inactivity.

Background: Price series launched April 1987 when the publication started.

Middle East (India) Contract

Grade: Anhydrous ammonia (82% nitrogen) stored and transported as a fully refrigerated liquid

at -33°C (-28°F).

Price basis: FOB

Credit/Payment terms: Usually 30 or 60 days, cost of which is deducted when assessing netback.

Packaging: bulk

Loading Location: Saudi Arabia: Jubail and Ras Al- Khair; Iran: BIK and Assaluyeh; Qatar:

Mesaieed; UAE: Ruwais; Kuwait: Shuaiba; Bahrain: Sitra; Oman: Sur.

Type: Netback from contracts.

Currency: US dollar Weight Unit: metric tonne

Size: 4,000 mt to 23,500 mt.

Timing: Prompt business up to four weeks ahead; occasionally five.

Pricing: Prices are netted back from Indian CFR contract prices (see methodology for India)

Duties/Tariffs: None.



Notional Assessment: In the absence of Indian CFR contracts, prices can also be assessed including views from

Indian sources and traders, or netbacks from CFR prices from deliveries to Southeast Asia and the Far East. Sales to India from other supply sources will also be used for netback calculations in the absence of confirmed Middle East deals. In the absence of business, firm bids and offers to be incorporated into assessment if two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent Business" may be applied if no firm bids or offers. A "no market" with null values is posted with four weeks or more

of market inactivity.

Background: Price series launched November 2010.

Middle East Spot/Contract

Grade: Anhydrous ammonia (82% nitrogen) stored and transported as a fully refrigerated liquid

at -33°C (-28°F).

Price basis: FOB

Credit/Payment terms: Price is a range between theMiddle East spot and contract price assessments.

Packaging: bulk

Loading Location: Saudi Arabia: Jubail and Ras Al- Khair; Iran: BIK and Assaluyeh; Qatar:

Mesaieed; UAE: Ruwais; Kuwait: Shuaiba; Bahrain: Sitra; Oman: Sur.

Type: Range of spot and contract prices as posted on same date. The upper, respectively lower

ends of both are used to appropriately project the spread.

Currency: US dollar Weight Unit: metric tonne

Size: 4,000 mt - 23,500 mt.

Timing: As per spot and contract assessments. Deliveries four weeks forward.

Pricing: The price is derived from a combination of the low end of the netted back CFR India

contract price and the high end of the Middle East FOB spot price, or vice versa.

Duties/Tariffs: None.

Notional Assessment: In the absence of activity on the Indian CFR contract and Middle East FOB spot market

see "Notional Assessment" for those price assessments. In the absence of business, firm bids and offers to be incorporated into assessment if two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent Business" may be applied if no firm bids or offers. A "no market" with null values is posted with four weeks or more of

market inactivity.

Background: Price series launched September 2011.

Caribbean

Grade: Anhydrous ammonia (82% nitrogen) stored and transported as a fully refrigerated liquid

at -33°C (-28°F).

Price basis: FOB
Credit/Payment terms: Cash/sight
Packaging: bulk

Loading Location: Venezuela and Trinidad and Tobago.

Type: Spot
Currency: US dollar
Weight Unit: metric tons

Size: 18-30,000 mt typically
Timing: Up to 30 days forward loading.

Main Consumer Markets: US Gulf, Brazil and western Europe.

Duties/Tariffs: None. 27

Pricing: Generally prices inferred from CFR sales ex- Trinidad and Tobago and Venezuela, as

rarely sales are reported on an FOB basis by participants.

Notional Assessment: Not applicable, as price cannot be inferred from global trade outside of the Caribbean.

Background: Price series launched November 2010

US New Orleans barge

Grade: Anhydrous ammonia (82% nitrogen) stored and transported as a fully refrigerated liquid

at -33°C (-28°F).

Price basis: FOB



Credit/Payment terms: Cash/sight Packaging: bulk

Loading Location: Ammonia plants in the US Gulf and vessel discharges to barges and railcars at New

Orleans.

Type: Spot
Currency: US dollar
Weight Unit: short ton

Size: Generally 2,500 st, barges and 100 st railcars.

Timing: Spot purchases are for delivery within two weeks.

Main Consumer Markets: US Midwest Duties/Tariffs: None.

Pricing: Producer price lists, reports from inland resellers. Prices do not shift as frequently as the

international market. Supply is very controlled, mostly due to logistical limitations of

available barges.

Notional Assessment: Prices frequently inferred based on enduser sales and replacement costs basis recent US

Gulf imports.

Background: Barge and rail ammonia often is sold on a delivered basis or on a formula, rather than

spot FOB sales currently. However, these patterns are not fixed.

US Midwest

Grade: 82-0-0
Price basis: FOB
Credit/Payment terms: Cash/sight
Packaging: bulk

Loading Location: Trucks and railcars loading from terminals, pipeline outlets and plants across the region.

Type: Spot
Currency: US dollar
Weight Unit: short ton

Size: 25 st trucks or 100 st rail cars.

Timing: Spot purchases are for delivery within two weeks.

Main Consumer Markets: Distributors across Nebraska, Iowa, Minnesota, Wisconsin, Illinois, Indiana and Ohio.

Pricing: Reports on trade between producers, traders, distributors and retailers.

Duties/Tariffs: Not applicable.
Notional Assessment: Not applicable.

Background: Reporting on forward offers as important as prompt market, as vast majority of business

is completed on a forward or indexed basis. Price series launched July 2002.

US Midwest East

Grade: 82-0-0
Price basis: FOB
Credit/Payment terms: Cash/sight
Packaging: bulk

Loading Location: Trucks and railcars loading from terminals, pipeline outlets and plants across the region.

Type: Spot
Currency: US dollar
Weight Unit: short ton

Size: 25 st trucks or 100 st rail cars.

Timing: Spot purchases are for delivery within two weeks.

Main Consumer Markets: Distributors across Wisconsin, Illinois, Indiana and Ohio.

Pricing: Reports on trade between producers, traders, distributors and retailers.

Duties/Tariffs: Not applicable. Notional Assessment: Not applicable.

Background: Reporting on forward offers as important as prompt market, as vast majority of business

is completed on a forward or indexed basis. Price series launched July 1990.

US Midwest West

Grade: 82-0-0 Price basis: FOB



Credit/Payment terms: Cash/sight Packaging: bulk

Loading Location: Trucks and railcars loading from terminals, pipeline outlets and plants across the region.

Type: Spot
Currency: US dollar
Weight Unit: short ton

Size: 25 st trucks or 100 st rail cars.

Timing: Spot purchases are for delivery within two weeks. Main Consumer Markets: Distributors across Nebraska, Iowa, and Minnesota.

Pricing: Reports on trade between producers, traders, distributors and retailers.

Duties/Tariffs: Not applicable.
Notional Assessment: Not applicable.

Background: Reporting on forward offers as important as prompt market, as vast majority of business

is completed on a forward or indexed basis. Price series launched July 1990. 28

US Northern Plains

Grade: 82-0-0
Price basis: FOB
Credit/Payment terms: Cash/sight
Packaging: bulk

Loading Location: Trucks and railcars loading from terminals across the region.

Type: Spot
Currency: US dollar
Weight Unit: short ton

Size: 25 st trucks and 100 st railcars.

Timing: Spot purchases are for delivery within two weeks.

Main Consumer Markets: Retailers across North and South Dakota.

Pricing: Reports on trade between producers, traders, distributors and retailers.

Duties/Tariffs: Not applicable.
Notional Assessment: Not applicable.

Background: Reporting on forward offers as important to readers as prompt market, as vast majority

of business is completed on a forward or indexed basis. Forward prices shift almost as

often as prompt values. Price series launched July 1990.

US Southern Plains

Grade: 82-0-0
Price basis: FOB
Credit/Payment terms: Cash/sight
Packaging: bulk

Loading Location: Trucks loading from plants, pipeline outlets and river terminals across the region.

Type: Spot
Currency: US dollar
Weight Unit: short ton
Size: 25 st trucks.

Timing: Spot purchases are for delivery within two weeks.

Main Consumer Markets: Retailers across Arkansas, Oklahoma, western Kansas and Texas.

Pricing: Producer price lists, reports from inland resellers. Prices will shift in season and during fill

seasons, but not as frequently as dry forms of nitrogen.

Duties/Tariffs: Not applicable.
Notional Assessment: Not applicable.

Background: Reporting on forward offers as important to readers as prompt market, as vast majority

of business is completed on a forward or indexed basis. Forward prices shift almost as

often as prompt values. Price series launched July 1990.

Ammonia Southeast Asia FOB

Grade: Anhydrous ammonia (82% nitrogen) stored and transported as a fully refrigerated liquid

at -33°C (-28°F).

Price basis: FOB.

Credit/Payment terms: Sight Letter of Credit.



Packaging: Bulk

Loading Location: Bontang/Palembang/Kerteh

Type: Spot
Currency: US dollar
Weight Unit: metric tonne
Size: 5-23,000 mt

Timing: Prompt business up to four weeks ahead; occasionally five.

Key Supply Sources: Indonesia and Malaysia

Pricing: Derived from sales concluded by producers in Indonesia and Malaysia direct or via

traders. Netback calculations on confirmed CFR sales are used to assess pricing in the absence of confirmed FOB sales. Producers are Pupuk Kaltim, Parna Raya (KPI), KPA and

Pusri. Petronas is the main supplier from Malaysia.

Duties/Tariffs: None

Notional assessment: Netback calculations on confirmed CFR sales are used to calculate FOB values. Firm bids

and firm offers are used in the absence of a confirmed trade. In the absence of business,

firm bids and offers to be incorporated into assessment if two weeks of market

inactivity, with an "Indicative Price" notation. A "No Recent Business" may be applied if no firm bids or offers. A "no market" with null values is posted with four weeks or more

of market inactivity.

Background: Price series launched January 2016.

AMMONIA CFR

Southern Europe duty paid

Grade: Anhydrous ammonia (82% nitrogen) stored and transported as a fully refrigerated liquid

at -33°C (-28°F).

Price basis: CFR

Credit/Payment terms: Prices are assessed on a cash equivalent, taking into account credit terms, if provided.

Packaging: bulk

Delivery Location: Mainly Turkey, Italy and Spain.

Type: Mainly contract, occasionally spot.

Currency: US dollar Weight Unit: metric tonne

Size: 4,000 mt to 23,500 mt.

Timing: Prompt business up to four weeks ahead; occasionally five.

Main Consumer Markets: Black Sea to Turkey; Black Sea, Algeria and Libya to Spain and Italy.

Pricing: Prices are derived from reported direct purchases.

Duties/Tariffs: Russia pays 5.5% duty. Ukraine enters 29

duty free.

Notional Assessment: In the absence of confirmed trades, an indicative price may be applied based on the low

end FOB Black Sea price assessment plus freight and costs and the high end of the FOB Black Sea assessment plus freight and costs plus 5.5% duty. In the absence of business, firm bids and offers to be incorporated into assessment if two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent Business" may be applied if

no firm bids or offers. A "no market" with null values is posted with four weeks or more

of market inactivity.

Background: Price series launched March 1988.

NW Europe duty paid

Grade: Anhydrous ammonia (82% nitrogen) stored and transported as a fully refrigerated liquid

at -33°C (-28°F).

Price basis: CFR

Credit/Payment terms: Prices are assessed on a cash equivalent, taking into account credit terms, if provided.

Packaging: bulk

Delivery Location: Various ports.

Type: Spot and contract.

Currency: US dollar



Weight Unit: metric tonne

Size: 4,000 mt to 23,500 mt.

Timing: Prompt business up to four weeks ahead; occasionally five.

Main Consumer Markets: Yara plants in Finland, Norway, Sweden and France; BASF in Antwerp; GPN in Rouen. Pricing:

Prices are derived from confirmed purchases by importers listed above and confirmed

sales by suppliers.

Duties/Tariffs: Russia pays 5.5% duty. Ukraine enters duty free.

Notional Assessment: In the absence of confirmed trades, an indicative price may be applied based on the low

end of the FOB Black Sea and/or FOB Baltic price assessment plus freight and costs and

the high end of the FOB Black Sea and/or FOB Baltic price assessment.

Background: Price series launched April 1987 when the publication started.

Turkey

Grade: Anhydrous ammonia (82% nitrogen) stored and transported as a fully refrigerated liquid

at -33°C (-28°F).

Price basis: CFR

Credit/Payment terms: Varies by contract, but 180 days credit normally prevails

Packaging:

Delivery Location: Mersin, Ceyhan, Samsun, Gemlik, Bandirma, Aliaga and Izmir/Nemrut Bay

Type: Spot or contract Currency: **US** dollar Weight Unit: metric tonne

Size: On average 685,000 mt each year but can vary

Timing: Prompt business up to four weeks ahead; occasionally five.

Main supply sources: Mainly Black Sea, occasionally Egypt. Supply from Sorfert/Algeria is likely from Q4, 2013 Pricing:

Prices are derived from direct purchases by Toros, Gemlik Gübre, Pektim, Ege Gübre and

Bagfas

Duties/Tariffs: None

Notional Assessment: In the absence of confirmed trades, an indicative price may be applied based on the

> Black Sea FOB price plus freight assessed basis prevailing time-charter rates .In the absence of business, firm bids and offers to be incorporated into assessment if two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent Business" may be applied if no firm bids or offers. A "no market" with null values is posted with

four weeks or more of market inactivity

Background: Price series launched November 2013

Morocco

Grade: Anhydrous ammonia (82% nitrogen) stored and transported as a fully refrigerated liquid

at -33°C (-28°F).

Price basis:

Credit/Payment terms: Sight at first presentation of shipping documents or, if credit is granted by seller usually

30 days from bill of lading date.

Packaging: bulk **Delivery Location:** Jorf Lasfar. Spot and contract. Type: Currency: US dollar

Weight Unit: metric tonne Size: Usually 23,500 mt but can vary.

Timing: Prompt business up to four weeks ahead; occasionally five. Main Supply Sources: Black Sea, Baltic Sea, occasionally US/Trinidad and Middle East.

Prices are derived from direct purchases by OCP. Pricing:

Duties/Tariffs: None.

Notional Assessment: In the absence of confirmed trades, an indicative price may be applied based on the FOB

> Black Sea price assessment plus freight and costs plus 2% duty. In the absence of business, firm bids and offers to be incorporated into assessment if two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent Business" may be applied if no firm bids or offers. A "no market" with null values is posted with four weeks or more

of market inactivity.



Background: Price series launched August 2001.

India

Grade: Anhydrous ammonia (82% nitrogen) stored and transported as a fully refrigerated liquid

at -33°C (-28°F).

Price basis: CFR 30

Credit/Payment terms: Varies by contract, but 30 and 60 days credit normally prevails.

Packaging: bulk

Delivery Location: All Indian ports with receiving facilities for ammonia.

Type: Long term contracts, occasionally includes spot sales and FACT tender purchases.

Currency: US dollar Weight Unit: metric tonne

Size: 5,000 mt to 23,500 mt.

Timing: Contract and spot shipments up to two weeks ahead of delivery butcommonly reported

after loading.

Key Supply Sources: Mainly Middle East Gulf. Nitrochem has 2013 contract for monthly deliveries of 40,000

mt from Black Sea with IFFCO. Some imports from Indonesia and Malaysia.

Duties/Tariffs: none.

Pricing: Long term contracts priced via formulae. Standard formula is based on Middle East FOB

plus freight as published by select fertilizer market reports.

Notional Assessment: In the absence of confirmed spot deals and/or pricing via formulae, an indicative price

may be applied based on the FOB Middle East (India) contract price assessment plus

freight.

Background: Price series launched August 1988.

South Korea/Taiwan/China

Grade: Anhydrous ammonia (82% nitrogen) stored and transported as a fully refrigerated liquid

at -33°C (-28°F).

Price basis: CFR

Credit/Payment terms: Credit as per contract; 30-60 days are common. Spot deals mainly at sight.

Packaging: bulk
Delivery Location: See below

Type: Mainly annual contract based on Middle East Gulf, Southeast Asia spot/contract, can

also include spot from all origins

Currency: US dollar Weight Unit: metric tonne

Size: 5,000 mt to 40,000 mt.

Timing: Deliveries mainly reported on shipment.

Main Consumer Markets: South Korea: Samsung Fine Chemicals, Namhae. Taiwan: CPDC, Taiwan Fertilizer

Company, China: Nanjing Trammo, Zhanjiang Gemoil, Caojing SECCO, BASF and Bayer

Duties/Tariffs: None.

Pricing: Prices derived from confirmed spot purchases and/or deliveries made under contracts.

Long term contracts priced via formulae. Standard formula is based on Middle

East/Southeast Asia FOB plus freight as published by select fertilizer market reports.

Notional Assessment: In the absence of confirmed spot deals and/or pricing via formulae, an indicative price

may be applied based on the FOB Middle East (India) contract price assessment plus

freight.

Background: Price series launched May 1991.

Southeast Asia

Grade: Anhydrous ammonia (82% nitrogen) stored and transported as a fully refrigerated liquid

at -33°C (-28°F).

Price basis: CFR

Credit/Payment terms: Credit as per contract; 30-60 days are common. Spot deals mainly at sight.

Packaging: bulk
Delivery Location: See below



Type: Mainly annual contracts based on Middle East Gulf spot/contract; spot includes regular

purchase tenders by Vinachem in Vietnam, Gresik in Indonesia and Philphos in the

Philippines.

Currency: US dollar
Weight Unit: metric tonnes
Size: 5,000 mt to 23,500 mt.

Timing: Deliveries mainly reported on shipment.

Main Consumer Markets: Thailand Vietnam, Indonesia, Philippines.

Duties/Tariffs: Varies but no impact on price assessments.

Pricing: Prices derived from confirmed spot purchases and/or deliveries made under contracts.

Long term contracts priced via formulae. Standard formula is based on Middle East FOB

plus freight as published by select fertilizer market reports.

Notional Assessment: In the absence of confirmed spot deals and/or pricing via formulae, an indicative price

may be applied based on the FOB Middle East (India) contract price assessment plus

freight.

Background: Price series launched May 2006.

US Gulf

Grade: Anhydrous ammonia (82% nitrogen) stored and transported as a fully refrigerated liquid

at -33°C (-28°F).

Price basis: CFR
Credit/Payment terms: Cash/sight
Packaging: bulk

Delivery Location: US Gulf from Tampa to Texas. Tampa FL, Pascagoula MS, Mississippi River, Texas coast.

Type: Spot
Currency: US dollar
Weight Unit: metric tons
Size: 12-35,000 mt

Timing: 20-40 days in advance. Spot cargos have 30-60 day lead times, routine business includes

routine shipments from the Caribbean and the FSU.

Key Supply Sources: Trinidad and Tobago, Venezuela, Black Sea, Baltic Sea, Middle East.

Duties/Tariffs: None

Pricing: Based on business concluded by US Gulf phosphate producers and international

ammonia suppliers.

Notional Assessment: Price can be inferred from the 31 CFR Tampa benchmark, when Gulf activity is limited to

that benchmark.

Background: US Gulf phosphate producers price purchases on a monthly basis. In addition to

phosphate producers, industrial demand around the Gulf is met through imports, plus some domestic direct application demand on a seasonal basis. Price series launched June

2000.

US Tampa

Grade: Anhydrous ammonia (82% nitrogen) stored and transported as a fully refrigerated liquid

at -33°C (-28°F).

Price basis: CFR
Credit/Payment terms: Cash/sight
Packaging: bulk

Delivery Location: Tampa FL only

Type: Spot or contract or combination

Currency: US dollar Weight Unit: metric tonnes

Size: 12-35,000 mt, but larger volumes sometimes discharge at Tampa and elsewhere in the

US Gulf.

Timing: 20-40 days in advance. Almost entirely monthly negotiations.

Key Supply Sources: Trinidad and Tobago, Venezuela, Black Sea, Baltic Sea and Middle East.

Duties/Tariffs: None

Pricing: Based on negotiations between Florida phosphate producers and international suppliers

for single cargo or monthly deliveries.



Notional Assessment: Price is never inferred. Unless all Florida phosphate plants halt operations for an

extended period. Previous negotiated price stands until new monthly agreement is

reached or separate spot cargo confirmed.

Background: Price series launched March 1997.

NOLA/Texas

Grade: 82-0-0
Price basis: CFR
Credit/Payment terms: Cash/sight.
Packaging: bulk

Delivery Location: Pascagoula MS, Mississippi River, Texas coast.

Type: Contract and spot

Currency: US dollar Weight Unit: mt (metric tons) Size: 12-35,000 mt.

Timing: Spot cargos have 30-60 day lead times, includes routine shipments from the Caribbean

and the FSU.

Key Supply Sources: Trinidad, Venezuela, the Black Sea.

Duties/Tariffs: Not applicable.

Pricing: Imports are priced on a spot and indexed basis.

Notional Assessment: In the absence of confirmed spot business, price tag often is inferred from the Tampa

price tag.

Background: Price series launched August 1990.

AMMONIA DEL

Midwest rail

Grade: 82-0-0
Price basis: DEL
Credit/Payment terms: Cash/sight
Packaging: bulk

Delivery Location: Railheads across the region, but mostly east of the Mississippi River.

Type: Spot
Currency: US dollar
Weight Unit: short ton
Size: 100 st.

Timing: Spot purchases are for delivery within two weeks.

Main Consumer Markets: Retailers across Nebraska, Iowa, Illinois, Indiana and Ohio.

Pricing: Reports from producers, distributors, traders and retailers. Price sometimes posted as

NM during offseason.

Duties/Tariffs: Not applicable.
Notional Assessment: Not applicable.

Background: Price series launched August 2003.

California

Grade: 82-0-0
Price basis: DEL
Credit/Payment terms: Cash/sight
Packaging: bulk

Loading Location: Trucks and railcars loading from coastal terminals and railheads terminals across the

region.

Type: Spot
Currency: US dollar
Weight Unit: short ton

Size: 25 st trucks or 100 st rail cars

Timing: Spot purchases are for delivery within two weeks.

Main Consumer Markets: Retailers across the state, with most activity in the southern half of California.

Pricing: Producer price lists, reports from inland resellers. Prices will shift in season and during fill

seasons, but not as frequently as dry forms of nitrogen.

Duties/Tariffs: Not applicable.



Notional Assessment: Bids and offers from suppliers and endusers can be used in the absence of new business.

Background: Lack of storage for anhydrous ammonia in 32

California means ammonia railcars sometimes serve as short and medium term storage, but demurrage is not reflected in

reported prices. Price series launched July 1990.

PHOSPHATES DAP FOB

US Gulf/Tampa

Grade: DAP 18-46-0

Price basis: FOB

Credit/Payment terms: cash payment, no terms

Packaging: bulk

Loading Location: All Tampa FL terminals, Pascagoula MS and New Orleans (if transferred from barges or

loaded from Mosaic's Donaldsonville LA plant).

Type: Spot sales.
Currency: US dollar
Weight Unit: metric tonne

Size: Minimum 6,000 mt of business required to move the benchmark on new business. This

can include multiples - for example 3x3,000 mt from the supplier in the same week.

Timing: Typically up to 30 days forward.

Main Consumer Markets: Latin America, India, Pakistan, Australia, Japan, Southeast Asia.

Pricing: Producer or trader sales made FOB, or netted from CFR business. Generally only spot

business, except in the case where a long-term price agreement includes a cargo that will load within the next 30 days. In addition, producer cargos loaded for discharge in Latin America often are made up of multiple sales to multiple endusers made before and after

loading. These can yield multiple prices off of a single cargo.

Duties/Tariffs: Not applicable.

Notional Assessment: In the absence of business, firm bids and offers to be incorporated into assessment if

two weeks of market inactivity, with an "Indicative Price" notation. Generally, higher bids from endusers or lower offers from suppliers are required for these changes without actual business. Price may not be inferred from enduser markets unless US Gulf product is confirmed as part of the sale. A "No Recent Business" may be applied if no

firm bids or offers. A "no market" with null values very rarely applies.

Background: Consolidation over the last 15 years resulted in phosphate producers Agrifos and

Farmland exiting the industry. Cargill Fertilizer was merged with IMC Global to form Mosaic. The number of players in the US industry was further reduced with the completion in March 2014 of Mosaic's acquisition of CF Industries' phosphate assets.

Price series launched July 1990.

Saudi Arabia

Grade: DAP 18-46-0

Price basis: FOB

Credit/Payment terms: typically cash payment

Packaging: bulk

Loading Location: Ras Al-Khair, Saudi Arabia

Type: monthly spot sales and longer-term contracts

Currency: US dollar Weight Unit: metric tonne

Size: Typical cargo 25-35,000 mt (India, Pakistan); 5-10,000 mt (South Africa). 5,000 mt is

minimum size for assessment.

Timing: Typically 30 days forward.

Main Consumer Markets: India/Pakistan, Thailand/Vietnam, East/South Africa, Brazil/Argentina.

Pricing: Reflects Saudi producer MPC sales via Sabic and Ma'aden typically on a netback on CFR

sales to India, South Africa and Pakistan. Ma'aden and Sabic jointly market the

production from the Raz-Al-Khair plant.

Duties/Tariffs: EU duty of 6.5% applies. A 6% duty applies in Argentina.



Notional Assessment: In the absence of business, firm bids and offers to be incorporated into assessment if

two weeks of market inactivity, with an "Indicative Price" notation. If no bids or offers reported, it is to be assessed based on the MAP FOB Baltic/Black Sea price assessment. A "No Recent Business" may be applied if no firm bids or offers. As a key benchmark, a "no market" with null values very rarely applies, unless production is shut down for four

weeks or more.

Background: Price series launched September 2011 to reflect trial shipment sales to overseas markets

from August 2011 following the commissioning of the DAP production complex June 17,

2011. Commercial exports commenced in February 2012.

Baltic/Black Sea

Grade: DAP 18-46-0

Price basis: FOB

Credit/Payment terms: typically cash payment

Packaging: bulk

Loading Location: typically Muuga (Baltic) and Novorosyssk (Black Sea); Murmansk.

Type: monthly spot sales and longer-term contracts

Currency: US dollar Weight Unit: metric tonne

Size: Typical cargo 3-10,000 mt (Europe, incl. Turkey); 25-30,000 mt (Brazil/Argentina); 25-

35,000 mt (Pakistan); 25-50,000 mt (other Asian markets and the US). 5,000 mt is

minimum size for assessment.

Timing: Typically 30 days forward.

Main Consumer Markets: northwest and eastern Europe, including Turkey, and the Americas.

Pricing: Largely reflects producers EuroChem (Russia/ Lithuania), PhosAgro (Russia) and

Uralchem (Russia) sales typically on a FOB basis to northwest/eastern Europe and Turkey, or based on a netback on CFR sales to Brazil/Argentina and India/Pakistan.

Duties/Tariffs: EU duty of 6.5% applies on Russian DAP 33 but duty free on Lithuanian product. 6% duty

applies in Argentina.

Notional Assessment: In the absence of business, firm bids and offers to be incorporated into assessment if

two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent Business" may be applied if no firm bids or offers. As a key benchmark, a "no market" with null values very rarely applies, unless production is shut down for four weeks or

more.

Background: Price series launched September 2001 to reflect export sales by Russian/Lithuanian

producers.

North Africa

Grade: DAP 18-46-0

Price basis: FOB

Credit/Payment terms: typically cash payment

Packaging: bulk

Loading Location: Gabes, Tunisia and Jorf Lasfar, Morocco
Type: monthly spot sales and longer-term contracts

Currency: US dollar Weight Unit: metric tonne

Size: Typical cargo sizes reflect those in the FOB Tunisia and Morocco price assessments.

5,000 mt is minimum size for assessment.

Timing: Typically 30 days forward.

Main Consumer Markets: Reflects those in the FOB Tunisia and Morocco price assessments.

Pricing: Reflects the low end and the high end of the combined FOB Tunisia and Morocco price

assessment range.

Duties/Tariffs: EU duty of 3% does not apply - bilateral preference duty free as Maghreb country.

Notional Assessment: In the absence of business, firm bids and offers to be incorporated into assessment if

two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent Business" may be applied if no firm bids or offers. As a key benchmark, a "no market" with null values very rarely applies, unless production is shut down for four weeks or

more.



Background: Price series launched April 1987 when the publication started.

Morocco

Grade: DAP 18-46-0

Price basis: FOB

Credit/Payment terms: typically cash payment

Packaging: bulk

Loading Location: Jorf Lasfar, Morocco

Type: monthly spot sales and longer-term contracts

Currency: US dollar Weight Unit: metric tonne

Size: Typical cargo 25-30,000 mt (Brazil/Argentina), usually in combination with MAP; 5-

10,000 mt (western/ southern Europe); 50-55,000 mt (India). 5,000 mt is minimum size

for assessment.

Timing: Typically 30 days forward.

Main Consumer Markets: Brazil and Argentina, India, western/southern Europe.

Pricing: Reflects Moroccan producer OCP sales typically on a FOB basis to western/southern

Europe, or based on a netback on CFR sales to Brazil/Argentina and India.

Duties/Tariffs: EU duty of 3% does not apply - bilateral preference duty free as Maghreb country.

Notional Assessment: In the absence of business, firm bids and offers to be incorporated into assessment if

two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent Business" may be applied if no firm bids or offers. As a key benchmark, a "no market" with null values very rarely applies, unless production is shut down for four weeks or

more.

Background: Price series launched April 1987 when the publication started.

Tunisia

Grade: DAP 18-46-0

Price basis: FOB

Credit/Payment terms: typically cash payment

Packaging: bulk

Loading Location: Gabes, Tunisia

Type: monthly spot sales and longer-term contracts

Currency: US dollar Weight Unit: metric tonne

Size: Typical cargo 5-15,000 mt (Europe, incl. Turkey); 25-35,000 mt (Brzail/Argentina,

Bangladesh); 5,000 mt is minimum size for assessment.

Timing: Typically 30 days forward.

Main Consumer Markets: Southern Europe, including Turkey, Latin America and Indian Subcontinent.

Pricing: Reflects Tunisian producer GCT sales typically on a FOB basis to western Europe and

Turkey, or based on a netback on CFR sales typically to Brazil, Argentina.

Duties/Tariffs: EU duty of 3% does not apply - bilateral preference duty free as Maghreb country.

Notional Assessment: In the absence of business, firm bids and offers to be incorporated into assessment if

two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent Business" may be applied if no firm bids or offers. A "no market" with null values very

rarely applies, unless production is shut down for four weeks or more.

Background: Price series launched May 2006 to reflect a more balanced assessment for North Africa.

China

Grade: DAP 18-46-0

Price basis: FOB

Credit/Payment terms: typically cash payment

Packaging: bulk

Loading Location: Fangcheng (YTH) and Beihai (Weng34 fu) in Guangxi, Zhanjiang in Guangdong (Kailin) and

Nanjing/Yangtze River in Jiangsu (Yihua).

Type: monthly spot sales

Currency: US dollar Weight Unit: metric tonne



Size: Typical cargo 30-50,000 mt (India); 25-35,000 mt (Pakistan/Bangladesh); 5-7,000 mt

(Vietnam). 5,000 mt is minimum size for assessment.

Timing: Typically 30 days forward.

Main Consumer Markets: Indian Subcontinent, namely India, Pakistan and Bangladesh, Vietnam. Also the US.

Pricing: Mainly reflects sales by the largest Chinese producers, e.g. YTH (and its trading arm YUC),

Kailin, Wengfu and Yihua either directly or via traders during the lower export tax window (see Duties/Tariffs below). Sales typically based on a netback on CFR sales to India, Pakistan, Bangladesh and Vietnam. The price is also assessed outside the lower export tax window, if and when product is shipped from bonded warehouses at port. Export tax for 2014 is RMB 50/mt in off-season (May 16-October 15). High season tax is

15% on net export value plus RMB 50/mt. (January 1-May 15 and October 16-December

31).

Notional Assessment: In the absence of business, firm bids and offers to be incorporated into assessment if

two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent Business" may be applied if no firm bids or offers. While still limited by seasonal restrictions, a "no market" can apply during the high tariff seasons. However these seasonal restrictions are gradually being relaxed and it is expected that they will be

removed in 2015.

Background: Price series launched March 2008, as China became an active net exporter of finished

phosphate products in recent years, particularly DAP. Its export programme has had a significant impact on the international supply/demand balance and therefore an

influence on price direction and market sentiment.

Mexico

Duties/Tariffs:

Grade: DAP 18-46-0

Price basis: FOB

Credit/Payment terms: typically cash payment

Packaging: bulk

Loading Location: Lazaro Cardenas, Mexico

Type: monthly spot sales and longer-term contracts

Currency: US dollar Weight Unit: metric tonne

Size: Typical cargo 25-30,000 mt. 5,000 mt is minimum size for assessment.

Timing: Typically 30 days forward.

Main Consumer Markets: US, Brazil, Argentina, Chile, Central America, Australia.

Pricing: American Fertilizer Trade (AFT) has an exclusive contract to market DAP/MAP

manufactured by Mexican producer Fertinal. It reflects sales to Latin America largely on a spot basis usually via traders. Australian business (mainly MAP) is predominantly on a contract basis and concluded directly. As production is located on the west coast, it has a freight advantage over US business on product sold to the west of coast South and Central America as well as sales to Australia given Panama Canal surcharge (estimated at around \$5/ mt). Conversely, marketers of US product have a freight advantage on sales

to east coast South and Central America.

Duties/Tariffs: 6% duty into Argentina.

Notional Assessment: In the absence of business, firm bids and offers to be incorporated into assessment if

two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent Business" may be applied if no firm bids or offers. A "no market" with null values very

rarely applies, unless production is shut down for four weeks or more.

Background: Price series launched November 2013.

Jordan

Grade: DAP 18-46-0

Price basis: FOB

Credit/Payment terms: typically cash payment

Packaging: bulk

Loading Location: Aqaba, Jordan

Type: monthly spot sales and longer-term contracts

Currency: US dollar



Weight Unit: metric tonne

Size: Typical cargo 20-40,000 mt (India); 5-20,000 mt (Turkey and Med markets). 5,000 mt is

minimum size for assessment.

Timing: Typically 30 days forward.

Main Consumer Markets: India and Turkey and other Mediterranean markets.

Pricing: : Reflects Jordanian producer JPMC sales typically on a netback on CFR sales to

India and Med markets.

Duties/Tariffs: Duty free into the EU, Tariff preference of 0% applies.

Notional Assessment: In the absence of business, firm bids and offers to be incorporated into assessment if

two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent Business" may be applied if no firm bids or offers. A "no market" with null values very

rarely applies, unless production is shut down for four weeks or more.

Background: Price series launched April 1987 when the publication started.

Australia

Grade: DAP 18-46-0

Price basis: FOB

Credit/Payment terms: typically cash payment

Packaging: bulk

Loading Location: Townsville, Australia 35
Type: monthly spot sales

Currency: US dollar Weight Unit: metric tonne

Size: Typical cargo 30-45,000 mt Timing: Typically 30 days forward.

Main Consumer Markets: Bangladesh, Pakistan, India and Vietnam.

Pricing: Quantum has an exclusive contract to market DAP/MAP manufactured by Australian

producer Incitec Pivot. It reflects mainly spot sales on a netback on CFR sales to the Indian Subcontinent. Export sales are seasonal, beginning around April and winding down around October, with the start of the domestic season in Australia. Contract business to New Zealand is not included in the price assessment, as formula pricing

applies.

Duties/Tariffs: Not applicable.

Notional Assessment: In the absence of business, firm bids and offers to be incorporated into assessment if

two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent Business" may be applied if no firm bids or offers. As a seasonal exporter, a "no market"

can apply during December-April.

Background: Price series launched November 2013.

US Central Florida

Grade: 18-46-0
Price basis: FOB
Credit/Payment terms: Cash.
Packaging: bulk

Loading Location: Railcars and trucks can be loaded from plants in Florida for US domestic destinations

only.

Type: Spot.
Currency: US dollar
Weight Unit: short ton

Size: 100 st (railcars) or 25 st (truck loads). The vast majority of DAP and MAP moves from

Florida plants by unit trains of 60 or more railcars.

Timing: No more than two weeks forward, with some leeway for US holidays.

Main Consumer Markets: US inland terminals mostly east of the Mississippi River.

Pricing: Business reported by producers in Florida and distributors primarily in the US Midwest.

Duties/Tariffs: Not applicable.

Notional Assessment: Very rare occurrence. In the absence of business, bid and offer spreads between

distributors and retailers or other suppliers to be incorporated into assessment if two weeks of market inactivity, with an "Indicative Price" notation. Generally, higher bids



from endusers or lower offers from suppliers are required for these changes without actual business. Price may not be inferred from enduser markets. A "No Recent Business" may be applied if no firm bids or offers. A "no market" with null values very

rarely applies.

Background: Price series launched July 1990.

US New Orleans barge

Grade: 18-46-0
Price basis: FOB
Credit/Payment terms: Cash.
Packaging: bulk

Loading Location: Barges can be loaded from plants around the US Gulf and from cargos discharging along

the Mississippi River in Louisiana. However, all FOB indications are based on an

assumption the barge starts at the mouth of the US Gulf.

Type: Spot.
Currency: US dollar
Weight Unit: short ton
Size: 1,500 st barge

Timing: No more than two weeks forward, with some leeway for US holidays.

Main Consumer Markets: Mostly US inland discharge points along the Mississippi River system, but physical trades

can remain in the Gulf area.

Pricing: Business reported by producers, importers, and domestic endusers along the Mississippi

River system.

Duties/Tariffs: Not applicable.

Notional Assessment: Very rare occurrence. In the absence of business for at least two weeks, bid and offer

spreads between distributors and retailers or other suppliers to be incorporated into assessment, with an "Indicative Price" notation. Generally, higher bids from endusers or lower offers from suppliers are required for these changes without actual business.

Background: Price series launched July 1990.

US Midwest

Grade: 18-46-0
Price basis: FOB
Credit/Payment terms: Cash/sight

Loading: Warehouses and river terminals throughout the region

Type: Spot
Currency: US dollars
Weight Unit: short ton
Size: 25 st

Timing: Prompt business generally calls for pickup within two weeks.

Key Supply Sources: Vast majority of product arrives from US plants to warehouses across the region by rail

and barge. Covers retailers in Nebraska, northern Kansas, Missouri, Iowa, Minnesota,

Iowa, Illinois and Ohio.

Pricing: Producer price lists, communications with independent distributors.

Duties/Tariffs: Not applicable.

Notes: US generally is a black-DAP market. Other 36 coloured product frequently must be

discounted except in periods of very high demand.

Notional Assessment: In the absence of spot business for at least two weeks, firm bid and offer spreads

between distributors and retailers or other suppliers may be incorporated into assessment. Generally, higher bids from endusers or lower offers from suppliers are

required for these changes without actual business.

Background: US domestic market typically provides the highest returns for US phosphate producers.

Price series launched July 1990.

US Cincinnati, Ohio

Grade: DAP 18-46-0

Price basis: FOB

Credit/Payment terms: Cash/sight



Packaging: bulk

Loading: Trucks/rail cars usually loaded from warehouses in the city, and from barges discharging

from the Ohio River.

Type: Spot
Currency: US dollars
Weight Unit: short ton

Size: 25 st (truck) or 100 st (rail)

Timing: Prompt business generally refers to product to be delivered within two weeks.

Main Consumer Markets: Distributors and endusers in Ohio, Indiana and Illinois. Pricing: Business reported by

producers, co-ops and independent distributors. Duties/Tariffs: N/A.

Notional Assessment: In an extended absence of new business distributors' postings or fill offers for the region

from producers can be used to provide an indicative price

Background: Price series launched December 31, 2015.

US Midwest East

Grade: 18-46-0
Price basis: FOB
Credit/Payment terms: Cash/sight

Loading: Warehouses and river terminals in Ohio, Kentucky, Indiana, Michigan, and Illinois.

Type: Spot
Currency: US dollars
Weight Unit: short ton
Size: 25 st

Timing: Prompt business generally calls for pickup within two weeks.

Key Supply Sources: Vast majority of product arrives from US plants to warehouses across the region by rail

and barge.

Pricing: Producer price lists, communications with independent distributors.

Duties/Tariffs: Not applicable.

Notes: US generally is a black-DAP market. Other colored product frequently must be

discounted except in periods of very high demand.

Notional Assessment: In the absence of spot business for at least two weeks, firm bid and offer spreads

between distributors and retailers or other suppliers may be incorporated into assessment. Generally, higher bids from endusers or lower offers from suppliers are

required for these changes without actual business.

Background: US domestic market typically provides the highest returns for US phosphate producers

Price series launched July 1990.

US Midwest West

Grade: 18-46-0
Price basis: FOB
Credit/Payment terms: Cash/sight

Loading: Warehouses and river terminals in Ohio, Kentucky, Indiana, Michigan, Illinois, Iowa,

Nebraska, Minnesota and eastern Kansas.

Type: Spot
Currency: US dollars
Weight Unit: short ton
Size: 25 st

Timing: Prompt business generally calls for pickup within two weeks.

Key Supply Sources: Vast majority of product arrives from US plants to warehouses across the region by rail

and barge.

Pricing: Producer price lists, communications with independent distributors.

Duties/Tariffs: Not applicable.

Notes: US generally is a black-DAP market. Other colored product frequently must be

discounted except in periods of very high demand.



Notional Assessment: In the absence of spot business for at least two weeks, firm bid and offer spreads

between distributors and retailers or other suppliers may be incorporated into assessment. Generally, higher bids from endusers or lower offers from suppliers are

required for these changes without actual business.

Background: US domestic market typically provides the highest returns for US phosphate producers.

Price series launched July 1990.

US Southern Plains

Grade: 18-46-0
Price basis: FOB
Credit/Payment terms: Cash/sight

Loading: Warehouses and river terminals in August, Oklahoma and Texas.

Type: Spot
Currency: US dollars
Weight Unit: short ton
Size: 25 st

Timing: Prompt business generally calls for pickup within two weeks.

Key Supply Sources: Vast majority of product arrives from US plants to warehouses across the region by

barge.

Pricing: Producer price lists, communications with independent distributors.

Duties/Tariffs: Not applicable.

Notes: US generally is a black-DAP market. Other colored product frequently must be

discounted except in periods of very high demand.

Notional Assessment: In the absence of spot business for at least two weeks, firm bid and offer spreads

between distributors and retailers or other suppliers may be incorporated into assessment. Generally, higher bids from endusers or lower offers from suppliers are

required for these changes without actual business.

Background: US domestic market typically provides the highest returns for US phosphate producers.

Price series launched July 1990.

US South

Grade: 18-46-0 Price basis: FOB

Credit/Payment terms: Cash/sight 37

Loading: Distributors' warehouses in states east of the Mississippi River and south of Mason-

Dixon.

Type: Spot
Currency: US dollars
Weight Unit: st (short tons)
Size: 25 st

Timing: Prompt business generally calls for pickup within two weeks.

Key Supply Sources: Vast majority of product arrives from US plants to warehouses across the region by rail

and barge.

Pricing: Producer price lists, communications with independent distributors.

Duties/Tariffs: Not applicable.

Notes: US generally is a black-DAP market. Other colored product frequently must be

discounted except in periods of very high demand.

Notional Assessment: In the absence of spot business for at least two weeks, firm bid and offer spreads

between distributors and retailers or other suppliers may be incorporated into assessment. Generally, higher bids from endusers or lower offers from suppliers are

required for these changes without actual business.

Background: US domestic market typically provides the highest returns for US phosphate producers.

Price series launched July 1990.

DAP - CPT BAGGED

US Twin Cities

Grade: DAP 18-46-0



Price basis: FOB
Credit/Payment terms: Cash/sight
Packaging: bulk

Loading: Trucks/rail cars usually loaded from warehouses in the Minneapolis, St. Paul,

Rosemont areas of Minnesota.

Type: Spot
Currency: US dollars
Weight Unit: short ton

Size: 25 st (truck) or 100 st (rail)

Timing: Prompt business generally refers to product to be delivered within two weeks

Main Consumer Markets: Distribution to agricultural retailers serving growers primarily in Minnesota but also

more distant markets including the Dakotas by rail. Pricing: Business reported by

producers, co-ops and independent distributors.

Duties/Tariffs: N/A.

Notional Assessment: In an extended absence of new business distributors' postings or fill offers for the

region from producers can be used to provide an indicative price Background: Price

series launched December 31, 2015

US Arkansas River

Grade: DAP 18-46-0

Price basis: FOB
Credit/Payment terms: Cash/sight.
Packaging: bulk

Loading location: River terminals and inland warehouses in Arkansas, Southern Kansas and

Oklahoma.

Type: Spot
Currency: US dollar
Weight Unit: short ton
Size: Typically 25 st

Timing: Prompt business generally calls for pickup within two weeks.

Key Supply Sources: Product is railed by producers mostly in the US or barged from the US Gulf from

overseas plants.

Pricing: Business reported by producers, traders, distributors and retailers. Most product

enters the region by barge or rail, before being distributed by truck and rail.

Duties/Tariffs: Not applicable

Notional Assessment: Bid and offer spreads between distributors and retailers or other suppliers can be useful

in the absence of spot business for at least two weeks. Background: Price series launched

July 2002.

China wholesale

Grade: DAP 18-46-0

Price basis: CPT

Credit/Payment terms: Cash payment or credit provided by distributors

Packaging: bagged

Loading Location: Wholesaler's (distributor's) warehouse

Type: Orders placed before buying season or during buying season

Currency: renminbi
Weight Unit: metric tonne

Size: Normally 50 mt or above. Sometimes as low as 5-10 metric tonne

Timing: Immediately delivery or 1-2days forward



Main Consumer Markets: Most areas in Northeast, Northwest and Northern China

Pricing: Price fluctuates with market situation and rely on negotiations between wholesalers,

distributors and retailers.

Duties/Tariffs: Not applicable.

Notional Assessment: In the absence of business, firm bids and offers may be incorporated into assessment if

two weeks of market inactivity.

Background: Price series launched May 2008. The gap between wholesaling price and ex-factory price

indicates the balance of domestic market.

DAP CFR

India

Grade: DAP 18-46-0

Price basis: CFR

Credit/Payment terms: typically cash payment

Packaging: bulk

Delivery Location: basis main discharge ports of Kandla, Mundra, Kakinada and Vizag. Type: longer-term contracts, weekly spot sales and tender business

Currency: US dollar Weight Unit: metric tonne

Size: Typical cargo 25-50,000 mt. 5,000 mt is minimum size for assessment.

Timing: Typically 30 days forward.

Key Supply Sources: Mosaic/US, JPMC/Jordan, YTH/ YUC/China, Sabic/Saudi Arabia; Ma'aden/Saudi Arabia;

Kailin/China, Various traders/China.

Pricing: Reflects larger spot purchases by key DAP importers, e.g. IPL,IFFCO, Chambal. Zuari,

Kribhco, Tata, Coromandel, Mosaic, RCF.

Duties/Tariffs: Not applicable.

Notional Assessment: In the absence of business, firm bids and offers to be incorporated into assessment if

two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent

Business" may be applied if no firm bids or offers. As a seasonal market, often not active

between December-February, a "no market" can apply.

Background: Price series launched February 2002, as India increasingly became an active net importer

of DAP, accounting for around 40-45% of all volumes traded internationally.

Pakistan

Grade: DAP 18-46-0

Price basis: CFR

Credit/Payment terms: typically cash payment

Packaging: bulk

Delivery Location: Karachi, Pakistan

Type: weekly spot sales - no longer-term contracts in place

Currency: US dollar Weight Unit: metric tonne

Size: 25-40,000 mt. 5,000 mt is minimum size for assessment.

Timing: Typically 30 days forward.

Key Supply Sources: Quantum/Australia, Gavilon/China, Keytrade/China, OCP/Morocco, Sabic and Ma'aden/

Saudi Arabia, Various traders/China 38

Pricing: Reflects purchases by key DAP importers Engro, United Agro, Chawla, Pak Arab, Jaffer

Brothers, Pacific Chartering and Fauji on a CFR basis.

Duties/Tariffs: Not applicable.

Notional Assessment: In the absence of business, firm bids and offers to be incorporated into assessment if

two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent Business" may be applied if no firm bids or offers. A "no market" with null values very

rarely applies.

Background: Price series launched May 2006, as Pakistan became an active net importer of DAP,

reaching 1.2 million mt in 2007. Yearly imports have however in 2010- 2014 have been

between 600-800,000 mt.



Argentina/Uruguay

Grade: DAP 18-46-0

Price basis: CFR

Credit/Payment terms: typically cash payment

Packaging: bulk

Delivery Location: typically San Nicolas and Bahia Blanca in Argentina, and Montevideo in Uruguay.

Type: monthly spot purchases

Currency: US dollar Weight Unit: metric tonne

Size: Typical cargo 25-30,000 mt. 5,000 mt is minimum size for assessment.

Timing: Typically 30 days forward.

Key Supply Sources: Currently US and Morocco. DAP from other sources is subject to an import duty (see

below)

Pricing: Reflects largely purchases by Argentinean DAP importers Profertil, Bunge, ACA, Mosaic

YPF and Yara on a CFR basis. In Uruguay: Isusa, Nidera, Bunge, ACA, ASP, Temac,

Macio, Dreyfus and ADM.

Duties/Tariffs: A duty of 6% applies in Argentina on DAP where the arsenic content is below 6mg/kg,

e.g from Russia, Saudi Arabia and Mexico. Imports are exempt of duty if it is equal or above 6 mg/kg. In Uruguay, there is no duty irrespective of arsenic content. A government ruling in Argentina stipulates importers are to obtain a special permission for imports of fertilizers, effective February 1, 2012. The permission to be granted or

possibly denied and apply on a cargo-to-cargo basis for an indefinite period.

Notional Assessment: In the absence of business, firm bids and offers to be incorporated into assessment if

two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent Business" may be applied if no firm bids or offers. However, if enough trading activity in neighbouring Brazil, the price point may be assessed at a premium to the MAP CFR Brazil price assessment by incorporating the freight differential, which varies between \$5-10/mt depending on the number of discharge ports. A "no market" with null values very

rarely applies.

Background: Price series launched November 2010 to reflect a more balanced view of the South

American market in addition to the CFR Brazil price

DAP DEL

US California

Grade: 18-46-0
Price basis: DEL
Credit/Payment terms: Cash/sight

Delivery Location: Distributors' across the state.

Type: Spot
Currency: US dollars
Weight Unit: st (short tons)
Size: 100 st

Timing: Prompt business generally calls for delivery within two weeks. Key Supply Sources: Vast majority of product arrives from US plants by rail.

Pricing: Producer price lists, communications with independent distributors.

Duties/Tariffs: Not applicable.

Notes: DAP and MAP in the state generally sell at the same price (assuming 11-52-0 MAP),

therefore MAP quotes in California can be used to indicate DAP values.

Notional Assessment: Bid and offer spreads between distributors and retailers or other suppliers can be useful

in the absence of new business for more than two weeks.

Background: DAP sometimes imported from China. Price series launched July 1990.

US Northwest

Grade: 18-46-0
Price basis: DEL
Credit/Payment terms: Cash/sight

Delivery Location: Distributors' across Washington, Oregon, and the Idaho panhandle.



Type: Spot
Currency: US dollars
Weight Unit: st (short tons)
Size: 100 st

Timing: Prompt business generally calls for delivery within two weeks. Key Supply Sources: Vast majority of product arrives from US plants by rail.

Pricing: Producer price lists, communications with independent distributors.

Duties/Tariffs: Not applicable.

Notes: DAP and MAP in the region generally sell at the same price (assuming 11-52-0 MAP),

therefore MAP quotes in the Northwest can be used to indicate DAP values.

Notional Assessment: Bid and offer spreads between distributors and retailers or other suppliers can be use39

ful in the absence of new business for more than two weeks.

Background: DAP sometimes imported from China. Price series launched July 1990.

DAP EXW

China

Grade: DAP 18-46-0

Price basis: EXW - truck or railway car at producer's plant

Credit/Payment terms: Remittance in advance or settlement after distributors sold the cargo, depending on the

supply & demand situation of current domestic market.

Packaging: bagged

Loading Location: at producers' plant

Type: Most orders are place before the two major buying seasons in spring & autumn started.

Distributors also build the stock in off season when price close to bottom or replenish

their stock during the buying season.

Currency: renminbi
Weight Unit: metric tonne

Size: normally 1,000 mt or above

Timing: two-to-three days to a week forward

Main Consumer Markets: While most producers are situated in Southwest China, major domestic markets are

Northeast, Northwest and Northern China

Pricing: Prices and settlement method are adjusted by market situation. In most actual cases,

producers would quote a delivered price to the railway station at buyer's location.

Deducting railway freight rate, it netback the ex-factory price.

Duties/Tariffs: Not applicable.

Notional Assessment: In the absence of business, firm bids and offers may be incorporated into assessment if

two weeks of market inactivity.

Background: Price series launched May 2008. Reflects overall price level of DAP in the domestic

Chinese market. Comparing it with FOB price or quotes from international price, the

difference is obvious.

DAP FCA

Terneuzen/Ghent

Grade: DAP 18-46-0
Price basis: FCA ex-warehouse

Credit/Payment terms: CAD or LC depending on customer standing. Credit up to 90 days frequently granted, but

prices are reported basis payment at sight.

Packaging: bulk

Loading: ex-warehouse northern ports

Type: Spot

Currency: Prices are reported in US dollar but trades often concluded in euro

Weight Unit: metric tonne
Size: 300-5,000 mt

Timing: Prompt business up to 2-3 weeks ahead
Key Supply Sources: Typically Lithuania, Russia, Morocco and Tunisia.



Pricing: Derived from price indications provided by regional traders, distributors and warehouse

operators in northwest Europe.

Duties/Tariffs: EU duty of 6.5% applies on Russian DAP Duty free on Lithuanian product, and North

African imports given bilateral preference as Maghreb country.

Notional Assessment: A rare occurrence. A week hardly ever passes without any trades. Firm offers and bids

are used to set a range in the absence of trading, as are prevailing FOB prices from

Morocco, Tunisia and Baltic, adding freight and terminal charges.

Background: Price series launched April 1987.

MAP FOB

US Gulf/Tampa

Grade: 11-52-0 (Mosaic and PotashCorp) or 10-50-0 (CF)

Price basis: FOB

Credit/Payment terms: cash payment, no terms

Packaging: bulk only

Loading Location: All Tampa FL terminals and New Orleans.

Type: Spot sales.
Currency: US dollars
Weight Unit: metric tonnes

Size: Minimum 6,000 mt of business required to move the benchmark on new business. This

can include multiples—for example 2x3,000 mt.

Timing: Typically up to 30 days forward.

Main Consumer Markets: Latin America, Australia, Japan, SE Asia.

Pricing: Producer or trader sales made FOB, or netted from CFR business. Generally only spot

business, except in the case where a long-term price agreement includes a cargo that will load within the next 30 days. In addition, producer cargos loaded for discharge in Latin America often are made up of multiple sales to multiple endusers made before and after

loading. These can yield multiple prices off of a single cargo. 40

Duties/Tariffs: 0% duty for EU on US MAP between 1/1/2014 and 12/31/2014.

Notional Assessment: In the absence of business, firm bids and offers may be incorporated into assessment if

two weeks of market inactivity. Generally, higher bids from endusers or lower offers

from suppliers are required for these changes without actual business.

Background: Consolidation over the last 15 years resulted in phosphate producers Agrifos and

Farmland exiting the industry. Cargill Fertilizer was merged with IMC Global to form Mosaic. In 2014 the industry was further rationalised with Mosaic's acquisition of CF

Industries' phosphate assets. Price series launched June 2004.

Baltic/Black Sea

Grade: MAP 11-52-0 & 12-52-0 (Phosagro/Russia); MAP 11-52-0 & 12-52-0 (EuroChem/Russia);

12-52-0 (Uralchem/Russia)

Price basis: FOB

Credit/Payment terms: typically cash payment

Packaging: bulk

Loading Location: typically Muuga (Baltic) and Novorosyssk (Black Sea); Murmansk.

Type: monthly spot sales and longer-term contracts

Currency: US dollar Weight Unit: metric tonne

Size: Typical cargo 3-10,000 mt (Europe, incl. Turkey); 25-30,000 mt (Brazil/Argentina) 25-

40,000 mt to the US. 5,000 mt is minimum size for assessment.

Timing: Typically 30 days forward.

Main Consumer Markets: nnorthwest and eastern Europe, including Turkey, and the Americas.

Pricing: Largely reflects producers EuroChem (Russia/ Lithuania), PhosAgro (Russia) and

Uralchem (Russia) sales typically on a FOB basis to northwest/eastern Europe and

Turkey, or based on a netback on CFR sales typically to Brazil/Argentina.

Duties/Tariffs: 0% duty for EU on Russian MAP between 1/1/2014 and 12/31/2014.



Notional Assessment: In the absence of business, firm bids and offers to be incorporated into assessment if

two weeks of market inactivity, with an "Indicative Price" notation. If no bids or offers reported, it is to be assessed based on the DAP FOB Baltic/Black Sea price assessment. A "No Recent Business" may be applied if no firm bids or offers. A "no market" with null

values very rarely applies.

Background: Price series launched 27 September 2001 to reflect export sales by Russian/Lithuanian

producers.

Morocco

Grade: MAP 11-52-0, 11-54-0, 11-55-0

Price basis: FOB

Credit/Payment terms: typically cash payment

Packaging: bulk

Loading Location: Jorf Lasfar, Morocco

Type: monthly spot sales and longer-term contracts

Currency: US dollar Weight Unit: metric tonne

Size: Typical cargo 25-30,000 mt, usually in combination with DAP. 5,000 mt is minimum size

for assessment.

Timing: Typically 30 days forward.

Main Consumer Markets: Brazil, Argentina, the US and Australia.

Pricing: Reflects Moroccan producer OCP sales typically based on a netback on CFR sales to Brazil

and Argentina. Depending on market conditions, a premium of as much as \$15/mt can apply over Moroccan DAP sales given slightly higher grade MAP compared with US, Rus-

sian product.

Duties/Tariffs: Not applicable.

Notional Assessment: In the absence of business, firm bids and offers to be incorporated into assessment if

two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent Business" may be applied if no firm bids or offers. As a key benchmark, a "no market" with null values very rarely applies, unless production is shut down for four weeks or

more.

Background: Price series launched November 2013.

US New Orleans barge

Grade: 11-52-0 (Mosaic and PotashCorp) or 10-50-0 (CF)

Price basis: FOB
Credit/Payment terms: Cash.
Packaging: bulk

Loading Location: Barges can be loaded from plants around the US Gulf and from cargos discharging along

the Mississippi River in Louisiana. However, all FOB indications are based on an

assumption the barge starts at the mouth of the US Gulf.

Type: Spot.
Currency: US dollar
Weight Unit: short ton
Size: 1,500 st barge.

Timing: No more than two weeks forward, with some leeway for US holidays.

Main Consumer Markets: Mostly US inland discharge points along the Mississippi River system, but physical trades

can remain in the Gulf area.

Pricing: Business reported by producers, importers, and domestic endusers along the Mississippi

River system.

Duties/Tariffs: N/A

Notional Assessment: In the absence of spot business for at least two weeks, firm bid and offer spreads

between distributors and retailers or other suppliers may be incorporated into assessment. Generally, higher bids from endusers or lower offers from suppliers are

required 41 for these changes without actual business.

Background: Price series launched May 2013.

US Midwest



Grade: MAP 11-52-0

Price basis: FOB
Credit/Payment terms: Cash/sight
Packaging: bulk

Loading Location: River terminals, regional production and producer warehouses. Type: Spot

Currency: US dollar
Weight Unit: short ton
Size: 25 st and 100 st

Timing:

Key Supply Sources: Prompt business generally calls for pickup within two weeks

Product arrives in the region by barge or rail by producers in the US and Canada, or from US Gulf and East Coast ports from overseas plants. Pricing: Business reported by producers, distributors and retailers. Covers retailers in Nebraska, northern Kansas, Missouri, Iowa, Minnesota, Iowa, Illinois and Ohio. Most DAP/MAP enters the region by

barge or rail, before being distributed by the truckload or by rail.

Duties/Tariffs: Not applicable

Notional Assessment: Bid and offer spreads between distributors and retailers or other suppliers can be useful

in the absence of new business for at least two weeks. Background: Price series launched July 1990.

US Twin Cities

Grade: MAP 11-52-0

Price basis: FOB
Credit/Payment terms: Cash/sight
Packaging: bulk

Loading: Trucks/rail cars usually loaded from warehouses in the Minneapolis, St. Paul, Rosemont

areas of Minnesota.

Loading: Trucks/rail cars usually loaded from warehouses in the

Type: Spot
Currency: US dollars
Weight Unit: short ton

Size: 25 st (truck) or 100 st (rail)

Timing: Prompt business generally refers to product to be delivered within two weeks. Main Consumer Markets: Distribution to agricultural retailers serving growers primarily in Minnesota but also

more distant markets including the Dakotas by rail. Pricing: Business reported by

producers, co-ops and independent distributors. Duties/Tariffs: N/A.

Notional Assessment: In an extended absence of new business distributors' postings or fill offers for the region

from producers can be used to provide an indicative price Background: Price series

launched December 31, 2015

US Cincinnati, Ohio

Grade: MAP 11-52-0

Price basis: FOB
Credit/Payment terms: Cash/sight
Packaging: bulk

Loading: Trucks/rail cars usually loaded from warehouses in the city, and from barges discharging

from the Ohio River.

Type: Spot
Currency: US dollars
Weight Unit: short ton

Size: 25 st (truck) or 100 st (rail)



Timing: Prompt business generally refers to product to be delivered within two weeks.

Main Consumer Markets: Distributors and end users in Ohio, Indiana and Illinois. Pricing: Business reported by

producers, co-ops and independent distributors. Duties/Tariffs: N/A.

Notional Assessment: In an extended absence of new business distributors' postings or fill offers for the region

from producers can be used to provide an indicative price

Background: Price series launched December 31, 2015

Fertilizer Week's Southern Plains granular DAP/MAP price lines provide an overall range for this product sold in Arkansas, southern Kansas, Oklahoma and Texas. Fertilizer Week also provides a subset within the region, defined as "Tulsa." This price line is limited to business reported from the Oklahoma terminals at Inola, Catoosa, Muskogee and Webbers Falls.

US Southern Plains

Grade: MAP 11-52-0

Price basis: FOB
Credit/Payment terms: Cash/sight
Packaging: bulk

Loading location: River terminals and inland warehouses in Arkansas, Oklahoma, Texas and southern

Kansas

Type: Spot
Currency: US dollar
Weight Unit: short ton

Size: Typically 25 st Timing: Prompt business generally calls for pickup within two weeks.

Key Supply Sources: Product is railed from North American plants or barged from the US Gulf from imports.

Pricing: Business reported by producers, traders, distributors and retailers. Most product enters

the region by barge or rail, before being distributed by the truckload.

Duties/Tariffs: Not applicable

Notional Assessment: Bid and offer spreads between distributors and retailers or other suppliers can be useful

In the absence of spot business for at least two weeks. Background: Price series launched

July 1990.

US Arkansas River

Grade: MAP 11-52-0

Price basis: FOB
Credit/Payment terms: Cash/sight.
Packaging: bulk

Loading location: River terminals and inland warehouses in Arkansas, Southern Kansas and Oklahoma.

Type: Spot
Currency: US dollar
Weight Unit: short ton
Size: Typically 25 st

Timing: Prompt business generally calls for pickup within two weeks.

Key Supply Sources: Product is railed by producers mostly in the US or barged from the US Gulf from overseas

plants.

Pricing: Business reported by producers, traders, distributors and retailers. Most product enters

the region by barge or rail, before being distributed by truck and rail.

Duties/Tariffs: Not applicable

Notional Assessment: Bid and offer spreads between distributors and retailers or other suppliers can be useful

in the absence of spot business for at least two weeks. Background: Price series launched

July 2002.

Mexico

Grade: MAP 11-52-0

Price basis: FOB



Credit/Payment terms: typically cash payment

Packaging: bulk

Loading Location: Lazaro Cardenas, Mexico

Type: monthly spot sales and longer-term contracts

Currency: US dollar Weight Unit: metric tonne

Size: Typical cargo 25-30,000 mt. 5,000 mt is minimum size for assessment.

Timing: Typically 30 days forward.

Main Consumer Markets: Australia, US, Brazil, Argentina, Central America.

Pricing: Australia, US, Brazil, Argentina, Chile, Central America.

Pricing: American Fertilizer Trade (AFT) has an exclusive contract to market MAP manufactured

by Mexican producer Fertinal. It reflects sales to the Americas, on a spot basis usually via traders. Australian business is predominantly on a contract basis and concluded directly. As production is located on the west coast, it has a freight advantage over US business on product sold to the west of coast South and Central America as well as sales to Australia given Panama Canal surcharge (estimated at around \$5/mt). Conversely, marketers of US product have a freight advantage on sales to east coast South and

Central America.

Duties/Tariffs: 0% duty for EU on Mexican MAP between 1/1/2014 and 12/31/2014.

Notional Assessment: In the absence of business, firm bids and offers to be incorporated into assessment if

two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent Business" may be applied if no firm bids or offers. A "no market" with null values very

rarely applies, unless production is shut down for four weeks or more.

Background: Price series launched November 2013.

Saudi Arabia

Grade: MAP 11-52-0

Price basis: FOB

Credit/Payment terms: Typically cash payment

Packaging: Bulk

Loading Location: Ras Al-Khair, Saudi Arabia

Type: Monthly spot sales, often formula-based

Currency: US dollar Weight Unit: Metric tonne

Size: Typical cargo 30,000 mt (Brazil) Timing: Typically 30 days forward.

Main Consumer Markets: Brazil/Argentina.

Pricing: Reflects Saudi producer MPC sales via Sabic and Ma'aden typically on a netback on CFR

sales to Brazil. Ma'aden and Sabic jointly market the production from the Ras-Al-Khair

plant.

Duties/Tariffs: A 6% duty applies in Argentina.

Notional Assessment: In the absence of business, firm bids and offers to be incorporated into assessment if

two weeks of market inactivity, with an "Indicative Price" notation. If no bids or offers reported, it is to be assessed based on the MAP FOB Baltic/Black Sea price assessment. A "No Recent Business" may be applied if no firm bids or offers. As a key benchmark, a "no market" with null values very rarely applies, unless production is shut down for four

weeks or more.

Background: Price series launched November 2016 to reflect increase in MAP sales during 2016 and

ahead of the commissioning of granular phosphate operations at Wa'ad Al Shamal in

2017.

China 11-44

Grade: MAP 11-44-0

Price basis: FOB

Credit/Payment terms: Typically cash payment

Packaging: Bulk

Loading Location: Fangcheng (YTH) and Beihai (Wengfu) in Guangxi, Zhanjiang in Guangdong (Kailin) and

Nanjing/Yangtze River in Jiangsu (Yihua)



Type: Monthly spot sales

Currency: US dollar Weight Unit: Metric tonne

Size: Typical cargo 30-40,000 mt (Brazil), 30,000 mt Australia, 30,000 mt India, 5,000 mt is

minimum size for assessment Typically 30 days forward.

Main Consumer Markets: Brazil, Australia, India, Southeast Asia

Pricing: Mainly reflects sales by the largest Chinese producers, eg. YTH, Kailin, Wengfu, Yihua and

New Yangfeng either directly or via traders. Sales typically based on a netback on CFR

sales to Brazil, Australia, India or Southeast Asia.

Duties/Tariffs: A 6% duty applies in Argentina. MAP export tax from China is RMB 80/mt

Notional Assessment: In the absence of business, firm bids and offers to be incorporated into assessment if

two weeks of market inactivity, with an "Indicative Price" notation. If no bids or offers reported, it is to be assessed based on the MAP FOB Baltic/Black Sea price assessment. A "No Recent Business" may be applied if no firm bids or offers. As a key benchmark, a "no market" with null values very rarely applies, unless production is shut down for four

weeks or more.

Background: Price series launched November 2016 to reflect increase in MAP sales from China in

2015/2016.42

MAP CFR

Brazil

Timing:

Grade: Granular MAP 11-52-0 & 12-52-0 (typically Phos- Agro/Russia, Eurochem/Russia,

Uralchem/Russia); Granular MAP 11-52-0, (typically OCP/Morocco, Mosaic/ US, Potash Corp/US, GCT/Tunisia, MPC/Saudi Arabia, Fertinal/Mexico, Foskor/South Africa,

IPL/Australia, Various/China)

Price basis: CFR

Credit/Payment terms: typically cash payment

Packaging: bulk

Delivery Location: typically Paranagua, Rio Grande, Aratu, Santos, Vitoria and Itaqui

Type: monthly spot purchases

Currency: US dollar Weight Unit: metric tonne

Size: Typical cargo 25-35,000 mt. 5,000 mt is minimum size for assessment.

Timing: Typically 30 days forward.

Key Supply Sources: As above

Pricing: Reflects largely purchases by key MAP importers including Mosaic, Bunge (Yara),

Fertipar, Yara, ADM and Heringer on a CFR basis.

Duties/Tariffs: A duty rate remains at 0%.

Notional Assessment: In the absence of business, firm bids and offers to be incorporated into assessment if

two weeks of market inactivity, with an "Indicative Price" notation. If no bids or offers reported, it is to be assessed at a discount to the DAP CFR Argentina/Uruguay price assessment by incorporating the freight differential, which varies between \$5-10/mt depending on the number of discharge ports. A "No Recent Business" may be applied if

no firm bids or offers. A "no market" with null values very rarely applies.

Background: Price series launched April 2002, as Brazil increasingly became a net importer of MAP. It

imported 2.37 million mt in 2013, according to the Brazilian Fertilizer Industry

Association ANDA.

Brazil 11-44

Grade: MAP 11-44-0

Price basis: CFR

Credit/Payment terms: Typically cash payment

Packaging: Bulk

Delivery Location: Typically Paranagua, Rio Grande, Aratu, Santos, Vitoria and Itaqui

Type: Monthly spot sales



Currency: US dollar Weight Unit: Metric tonne

Size: Typical cargo 30-40,000 mt. 5,000 mt is minimum size for assessment

Timing: Typically 30 days forward.

Key Supply Sources: China's YTH, Kailin, Wengfu, Yihua and New Yangfeng either directly or via traders
Pricing: Reflects largely purchases by key MAP importers including Fertipar, Heringer and Yara

Duties/Tariffs: Duty rate remains at 0%

Notional Assessment: In the absence of business, firm bids and offers to be incorporated into assessment if

two weeks of market inactivity, with an "Indicative Price" notation. If no bids or offers reported, it is to be assessed based on the MAP FOB Baltic/Black Sea price assessment. A "No Recent Business" may be applied if no firm bids or offers. As a key benchmark, a "no market" with null values very rarely applies, unless production is shut down for four

weeks or more.

Background: Price series launched November 2016 to reflect increase in MAP 11-44 purchases from

China in 2015/2016.

MAP EXW

China 11-44-0

Grade: MAP 11-44-0 powder

Price basis: EXW - truck or railway car at producer's plant

Credit/Payment terms: Remittance in advance or settlement after buyers (NPK producers) sold their product,

depending on the supply & demand situation of current domestic market.

Packaging: bulk

Loading Location: at producer's plant

Type: Since NPK plants are major buyers of MAP, orders are placed before the two major

buying seasons in spring & autumn started. NPK producers also build the stock in

summer for top dressing of maize or replenish their stock during the buying season.

Currency: renminbi
Weight Unit: metric tonne

Size: normally 500mt or above
Timing: 2 or 3 days to a week forward

Main Consumer Markets: Major domestic markets are throughout most regions of the country.

Pricing: Prices and settlement method are adjusted by market situation. In most actual cases,

producers would quote a delivered price to the railway station at buyer's location.

Deducting railway freight rate, it netback the ex-factory price.

Duties/Tariffs: No tax on DAP for domestic sales

Notional Assessment: In the absence of business, firm bids and offers to be incorporated into assessment if

two weeks of market inactivity.

Background: Price series launched May 2008. The price was introduced to compare with DAP price

and as major feedstock of NPK, indicates cost trend of NPKs.

China 10-50-0 43

Grade: MAP 10-50-0 granular

Price basis: EXW - truck or railway car at producer's plant Credit/Payment terms: Remittance in advance or settlement after sales

Packaging: bulk

Loading Location: at producer's plant

Type: Most 10-50-0 granular MAP is for export and is therefore subject to the same export

restrictions and tariffs as DAP.

Currency: renminbi
Weight Unit: metric tonne

Size: normally 1000mt or above Timing: One week to a month forward

Main Consumer Markets: Produced by some phosphate plants in Yunnan, Guizhou, Hubei and Sichuan for distri-

bution through major domestic sea ports.

Pricing: Prices and settlement method are judged by international prices and supply situation.



Duties/Tariffs: For calendar year 2014, it is subject to a flat fee of RMB 50/mt during in the off-season

(May 16-October 15). High season tax is 15% on net export value plus RMB 50/mt.

(January 1-May 15 and October 16-December 31)

Notional Assessment: In the absence of business, firm bids and offers to be incorporated into assessment if

two weeks of market inactivity.

Background: Price series launched May 2008. The price was introduced to indentify the cost of MAP

exported from China.

TSP FOB

Morocco

Grade: granular TSP 0-46-0

Price basis: FOB

Credit/Payment terms: typically cash payment

Packaging: bulk

Loading Location: Jorf Lasfar, Safi, Morocco Type: monthly spot sales

Currency: US dollar Weight Unit: metric tonne

Size: Typical cargo 25-30,000 mt. 5,000 mt is minimum size for assessment.

Timing: Typically 30 days forward.

Main Consumer Markets: Europe, Bangladesh, Brazil.

Pricing: Reflects Moroccan producer OCP sales typically on a FOB basis to western Europe, or

based on a netback on CFR sales to Brazil. BADC/Bangladesh's purchases priced on

formula under government-to-government agreement.

Duties/Tariffs: EU duty does not apply - bilateral preference duty free as Maghreb country.

Notional Assessment: In the absence of business, firm bids and offers to be incorporated into assessment if

two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent Business" may be applied if no firm bids or offers. A "no market" with null values very

rarely applies.

Background: Price series launched April 1987 when the publication started.

Tunisia

Grade: granular TSP 0-46-0

Price basis: FOB

Credit/Payment terms: typically cash payment

Packaging: bulk

Loading Location: Gabes, Tunisia
Type: monthly spot sales

Currency: US dollar Weight Unit: metric tonne

Size: Typical cargo 25-30,000 mt. 5,000 mt is minimum size for assessment.

Timing: Typically 30 days forward.

Main Consumer Markets: Europe, Bangladesh, Brazil.

Pricing: Reflects Tunisian producer GCT sales typically on a FOB basis to western Europe, or

based on a netback on CFR sales to Brazil. BADC/Bangladesh's purchases priced on

formula under government-to-government agreement.

Duties/Tariffs: EU duty does not apply - bilateral preference duty free as Maghreb country.

Notional Assessment: In the absence of business, firm bids and offers to be incorporated into assessment if

two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent Business" may be applied if no firm bids or offers. A "no market" with null values very

rarely applies.

Background: Price series launched May 2006 to reflect a more balanced assessment for North Africa.

China

Grade: granular TSP 0-46-0

Price basis: FOB



Credit/Payment terms: typically cash payment

Packaging: bulk

Loading Location: basis Fangcheng and Zhanjiang, China main port Type: monthly spot sales and longer-term contracts

Currency: US dollar Weight Unit: metric tonne

Size: Typical cargo 25-30,000 mt (Iran); 25-30,000 mt (Brazil); 10-20,000 mt (Sri Lanka). 5,000

mt is minimum size for assessment.

Timing: Typically 30 days forward.

Main Consumer Markets: Indonesia, Bangladesh, Sri Lanka, Brazil, Iran. 44

Pricing: Mainly reflects sales by the largest Chinese producers YTH (and its trading arm YUC), and

Kailin either directly or via traders during the lower export tax window (see

Duties/Tariffs below). Sales typically based on a netback on CFR sales to nearby markets Indonesia, Bangladesh and Sri Lanka and as far as field as Brazil and more recently Iran. The price is also assessed outside the lower export tax window, if and when product is

shipped from bonded warehouses at port.

Duties/Tariffs: Flat export tax of 5% applies throughout 2014for the whole of 2014.

Notional Assessment: In the absence of business, firm bids and offers to be incorporated into assessment if

two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent Business" may be applied if no firm bids or offers. As a key benchmark, a "no market"

with null values very rarely applies.

Background: Price series launched March 2008, as China became an active net exporter of finished

phosphate products in recent years, particularly DAP. Its export programme has had a significant impact on the international supply/demand balance and therefore an

influence on price direction and market sentiment.

TSP FCA

Benelux

Grade: granular TSP 0-46-0 Price basis: FCA ex-warehouse

Credit/Payment terms: CAD or LC depending on customer standing. Credit up to 90 days frequently granted, but

prices are reported basis payment at sight.

Packaging: bulk

Loading: ex-warehouse Ghent, Antwerp

Type: Spot

Currency: Prices are reported in US dollar but trades often concluded in euro

Weight Unit: Metric tonne Size: 300-5,000 mt

Timing: Prompt business up to three weeks ahead

Key Supply Sources: Typically Morocco and Tunisia.

Pricing: Derived from price indications provided by regional traders, distributors and warehouse

operators in northwest Europe.

Duties/Tariffs: Moroccan and Tunisian product incur no EU duty given bilateral preference as Maghreb

country.

Notional Assessment: Firm offers and bids are used to set a range in the absence of trading, as are prevailing

FOB prices from Morocco and Tunisia, adding freight and terminal charges. Turkish

product occasionally enters, and will then be used for netback calculations.

Background: Price series launched May 2006.

TSP CFR

Brazil

Grade: granular TSP 0-46-0

Price basis: CFR

Credit/Payment terms: typically cash payment

Packaging: bulk



Delivery Location: typically Paranagua, Rio Grande, Itaqui and Santos.

Type: monthly spot purchases

Currency: US dollar Weight Unit: metric tonne

Size: Typical cargo 25-30,000 mt. 5,000 mt is minimum size for assessment.

Timing: Typically 30 days forward.

Key Supply Sources: OCP/Morocco, ICL/Israel, YUC/ China ,GCT/Tunisia, Fertinal/Mexico, LCC/Lebanon.

Pricing: Reflects largely purchases by key TSP importers including Mosaic, Bunge

(Yara), Fertipar, Yara, ADM and Heringer on a CFR basis.

Duties/Tariffs: Not applicable.

Notional Assessment: In the absence of business, firm bids and offers to be incorporated into assessment if

two weeks of market inactivity, with an "Indicative Price" notation. If no bids or offers reported, it is to be assessed based on the MAP CFR Brazil price assessment at a discount, which varies between \$80-120/mt depending on trading. A "No Recent Business" may be applied if no firm bids or offers. A "no market" with null values very

rarely applies.

Background: Price series launched November 2013.

PHOSPHORIC ACID FOB

North Africa 100% P2O5

Grade: MGA 100% P2O5

Price basis: FOB

Credit/Payment terms: typically cash payment and 30 days credit, depending on destination

Packaging: bulk

Loading Location: Jorf Lasfar and Safi Morocco and Gabes, Tunisia

Type: quarterly contracts
Type: quarterly contracts

Currency: US dollar

Weight Unit: metric tonne P2O5

Size: Typical cargo 25-30,000 mt solution (16-18,000 mt P2O5 based on 53.5% average ratio)

for India and 5-10,000 mt 53.5% solution for Europe. 5,000 mt 53.5% solution is

minimum size for assessment. Typically 90 days forward. 45

Timing: Typically 90 days for Main Consumer Markets: India, Europe.

Pricing: Largely reflects Moroccan producer OCP and Tunisian producer GCT's sales typically on a

CFR basis to India and western Europe.

Duties/Tariffs: EU duty: 0% (bilateral preference - Maghreb country). Notional Assessment: Prior

quarter's price stands until new price agreed.

Background: Price series launched April 1987 when the publication started.

PHOSPHORIC ACID CFR

Brazil 100% P2O5

Grade: MGA 100% P2O5

Price basis: CFR

Credit/Payment terms: Typically cash payment

Packaging: Bulk

Delivery Location: Typically Paranagua, Rio Grande, Aratu, Santos, Vitoria and Itaqui

Type: Quarterly contracts and spot deals within that quarter

Currency: US dollar Weight Unit: Metric tonne

Size: Typical cargo 5-10,000 mt 54% solution. 5,000 mt 53% solution is minimum size for

assessment.

Timing: Typically 90 days forward.

Key Supply Sources: Potashcorp/US, OCP/Morocco and ICL/Israel



Pricing: Reflects quarterly contracts and spot sales on a CFR basis with buyers (mainly animal

feed producers like DSM/Tortuga).

Duties/Tariffs: Duty rate remains at 0%

Notional Assessment: Prior quarter's price stands until new prices agreed.

Background: Price series launched November 2016 to reflect broader range of phosphoric acid

coverage.

India 30 days 100% P2O5

Grade: MGA 100% P2O5

Price basis: CFR

Credit/Payment terms: 30 days credit

Packaging: bulk

Delivery Location: Kandla, Paradip, Visak, Kakinada, Goa, Mangalore, Sikka, JNPT, Cochin and Haldia

Type: quarterly contracts

Currency: US dollar Weight Unit: metric tonne

Size: Typical cargo 25-30,000 mt solution (16-18,000 mt P2O5 based on 53% average ratio).

5,000 mt 53% solution is minimum size for assessment.

Timing: Typically 90 days forward.

Key Supply Sources: OCP/Morocco, GCT/Tunisia, Foskor/South Africa PCS/US.

Pricing: Reflects quarterly contracts on a CFR basis with buyers IFFCO, PPL, CIL, ZIL, MCFL, GSFC,

DFCL, FACT and TCL.

Duties/Tariffs: Not applicable.

Notional Assessment: Prior quarter's price stands until new price agreed.

Background: Price series launched April 1987 when the publication started.

NW Europe 100% P2O5

Grade: MGA 100% P2O5

Price basis: CFR

Credit/Payment terms: typically cash payment

Packaging: bulk

Delivery Location: Rotterdam, Netherlands; Nantes/Montoir and St. Malo, France Type: quarterly contracts contracts and spot deals within that quarter.

Currency: US dollar Weight Unit: metric tonne

Size: Typical cargo 5-10,000 mt 53% solution on average. 5,000 mt 53% solution is minimum

size for assessment.

Timing: Typically 90 days forward.

Key Supply Sources: OCP/Morocco and GCT/Tunisia.

Pricing: Reflects quarterly contracts on a CFR basis with buyers EcoPhos, Belgium (largest buyer);

Prayon, Belgium (50/50 joint venture between the Walloon government and OCP); Yara, Belgium; Rosier, Belgium;. Sales of Moroccan phosphoric acid to Prayon are excluded

from the price assessment.

Duties/Tariffs: Not applicable.

Notional Assessment: Prior quarter's price stands until new price agreed.

Background: Price series launched April 1987 when the publication started.

PHOSPHATE ROCK FOB

Morocco (68-72% BPL)

Grade: 68-72% BPL Price basis: FOB

Credit/Payment terms: typically cash payment

Packaging: bulk

Loading Location: Casablanca, Morocco Type: quarterly contracts

Currency: US dollar



Weight Unit: metric tonne

Size: Typical cargo 45-50,000 mt. 5,000 mt is minimum size for assessment.

Timing: Typically 90 days forward. 46 Main Consumer Markets: India, the US and Brazil.

Pricing: Reflects Moroccan producer OCP sales typically on a CFR basis to India, and on a FOB

basis to the US and Brazil.

Duties/Tariffs: Not applicable.

Notional Assessment: Prior quarter's price stands until new price agreed.

Background: Price series launched January 1994.

Algeria (63-66% BPL)

Spot/Contract Grade: 63-66% BPL
Price basis: FOB

Credit/Payment terms: typically cash payment

Packaging: Bulk Loading Location: Annaba

Type: contracts and spot deals within that quarter

Currency: US dollar Weight Unit: metric tonne

Size: Typical cargo up to 50,000 mt. 5,000 mt is minimum size for assessment.

Timing: Typically 90 days forward.

Main Consumer Markets: Europe, Americas, Asia, Oceania.

Pricing: Reflects sales typically on a CFR and FOB basis to India and other markets

Duties/Tariffs: N/A.

Notional Assessment: Prior quarter's price stands until new price agreed.

Background: Price series launched January 2017.

Jordan (66-72% BPL)

Grade: 66-72% BPL Price basis: FOB

Credit/Payment terms: typically cash payment

Packaging: bulk Loading Location: Aqaba

Type: quarterly contracts

Currency: US dollar Weight Unit: metric tonne

Size: Typical cargo up to 80,000 mt. 5,000 mt is minimum size for assessment.

Timing: Typically 90 days forward. Main Consumer Markets: India, Indonesia, Europe.

Pricing: Reflects Jordanian producer JPMC sales typically on a FOB basis to India, and to other

markets such as Indonesia, Bulgaria

Duties/Tariffs: Not applicable.

Notional Assessment: Prior quarter's price stands until new price agreed.

Background: Price series launched November 2013.

Jordan (73-75% BPL)

Grade: 73-75% Price basis: FOB

Credit/Payment terms: typically cash payment

Packaging: bulk Loading Location: Aqaba

Type: quarterly contracts

Currency: US dollar Weight Unit: metric tonne

Size: Typical cargo up to 35,000 mt. 5,000 mt is minimum size for assessment.

Timing: Typically 90 days forward.

Main Consumer Markets: India



Pricing: Reflects Jordanian producer JPMC sales typically on a FOB basis to India, Duties/Tariffs:

Not applicable.

Notional Assessment: Prior quarter's price stands until new price agreed.

Background: Price series launched November 2013.

Egypt (60-68% BPL)

Grade: 60-68% BPL Price basis: FOB

Credit/Payment terms: typically cash payment

Packaging: bulk

Loading Location: Red Sea and Med ports, eg Hamrawein, Safaga and Alexandria

Type: quarterly contracts and spot deals within that quarter

Currency: US dollar Weight Unit: metric tonne

Size: Typical cargo up to 35,000 mt. 5,000 mt is minimum size for assessment.

Timing: Typically 90 days forward.

Main Consumer Markets: India, Bangladesh, Indonesia, Malaysia

Pricing: Reflects Trader sales typically on a CFR basis to India and other markets

Duties/Tariffs: Not applicable.

Notional Assessment: Prior quarter's price stands until new price agreed.

Background: Price series launched November 2013.

Peru (63-68% BPL)

Grade: 63-68% BPL Price basis: FOB

Credit/Payment terms: typically cash payment

Packaging: bulk Loading Location: Bayovar

Type: contracts and spot deals within that quarter 47

Currency: US dollar Weight Unit: metric tonne

Size: Typical cargo up to 50,000 mt. 5,000 mt is minimum size for assessment.

Timing: Typically 90 days forward.

Main Consumer Markets: India, US, Brazil, Mexico and others

Pricing: Reflects sales typically on a CFR and FOB basis to India and other markets

Duties/Tariffs: Not applicable.

Notional Assessment: Prior quarter's price stands until new price agreed.

Background: Price series launched November 2013.

PHOSPHATE ROCK - CFR

India (71-75% BPL)

Grade: 71-75% BPL Price basis: CFR

Credit/Payment terms: typically cash payment

Packaging: bulk

Delivery Location: WC and EC Indian ports
Type: quarterly contracts

Currency: US dollar Weight Unit: metric tonne

Size: Typical cargoes 25-35,000 mt and 45-50,000 mt. 5,000 mt is minimum size for

assessment.

Timing: Typically 90 days forward.

Key Supply Sources: JPMC/Jordan, OCP/Morocco, Getax/Togo and Vale/Peru.

Pricing: Reflects sales by JPMC, OCP, Getax and Vale typically on a CFR basis to a number of

importers.

Duties/Tariffs: Not applicable.



Notional Assessment: Prior quarter's price stands until new price agreed.

Background: Price series launched March 1997.

India (65-70% BPL)

Grade: 65-70% BPL Price basis: CFR

Credit/Payment terms: typically cash payment

Packaging: bulk

Delivery Location: WC and EC Indian ports

Type: monthly spot sales and longer-term contracts

Currency: US dollar Weight Unit: metric tonne

Size: Typical cargoes 25-35,000 mt. 5,000 mt is minimum size for assessment.

Timing: Typically 90 days forward.

Key Supply Sources: Egypt, Jordan, Morocco, Peru, Israel.

Pricing: Reflects largely sales by Egyptian, Jordanian, Moroccan and Peruvian suppliers typically

on a CFR or FOB basis to a number of importers.

Duties/Tariffs: Not applicable.

Notional Assessment: Prior quarter's price stands until new price agreed.

Background: Price series launched December 2010 to reflect a more balanced assessment for India.

SSP - CPT

Brazil inland 18-20% P2O5

Grade: 18-20% P2O5

Price basis: CPT

Credit/Payment terms: typically cash payment

Packaging: bulk

Loading Location: Rondonopolis

Type: spot
Currency: US dollar
Weight Unit: metric tonne

Size:

Timing: Typically 30 days forward.

Key Supply Sources: Domestic suppliers include Vale, Copebras/Anglo American, Galvani, Fospar, ADM,

Mosaic, Bunge and Heringer. Israel's ICL is the largest supplier to the country and has an

exclusive arrangement with importer Fertipar.

Pricing: Reflects sales of domestic producers on a CPT basis at Rondonopolis, the country's main

distribution centre.

Duties/Tariffs: Not applicable.

Notional Assessment: In the absence of business, firm bids and offers to be incorporated into assessment if

two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent Business" may be applied if no firm bids or offers. A "no market" with null values rarely

applies.

Background: Price series launched April 2013, to provide more clarity to a domestic market totalling

around 4.5-5 million mt, however only about 10% is traded internationally.

NPKs FOB

Baltic Sea 16-16-16

Grade: NPK 16-16-16. Prilled material with K2O content from KCl

Price basis: FOB vessel at loadport 48
Credit/Payment terms: Prepay or sight LVC

Packaging: bulk

Loading Location: Muuga and Klaipeda

Type: Largely long term contracts priced via formula, but also spot deals.

Currency: US dollar



Weight Unit: Metric tonne Size: 10-65,000 mt

Timing: Prompt to four weeks forward.

Main Consumer Markets: China and Thailand

Pricing: Derived from reported sales by producers such as Acron and Phosagro. Traders active in

the trade include Yara/Balderton and iTrade.

Duties/Tariffs: Not applicable.

Notional Assessment: When no confirmed sales are reported, delivered values in China and Thailand are used

for netback calculations.

Background: Price series launched May 2006.

Baltic Sea 15-15-15

Grade: NPK 15-15-15. Prilled material with K2O content from KCl

Price basis: FOB vessel at loadport Credit/Payment terms: Prepay or sight LC

Packaging: bulk

Loading Location: Muuga and Klaipeda

Type: Long term contracts priced via formula, but also spot deals.

Currency: US dollar Weight Unit: Metric tonne

Size: Typical cargo 25-35,000 mt depending on destination. 10,000 mt is minimum size for

assessment.

Timing: Prompt to four weeks forward

Pricing: Derived from reported sales by producers such as Acron and Phosagro. Traders active in

the trade include Yara, Mekatrade, Keytrade, Helm.

Duties/Tariffs: Not applicable.

Notional Assessment: When no confirmed sales are reported, delivered values in China and Thailand are used

for netback calculations.

Background: Price series launched November 2013.

Baltic Sea 10-26-26

Grade: NPK 10-26-26. Prilled material with K2O content from KCl

Price basis: FOB vessel at loadport Credit/Payment terms: Prepay or sight LC

Packaging: bulk

Loading Location: Muuga, Klaipeda and Yuzhny

Type: Long term contracts priced via formula, but also spot deals.

Currency: US dollar Weight Unit: Metric tonne

Size: Typical cargo 30-40,000 mt depending on destination. 10,000 mt is minimum size for

assessment.

Timing: Prompt to four weeks forward

Main Consumer Markets: India

Pricing: Derived from reported sales by producers such as Acron and Phosagro. Traders active in

the trade include Yara, Mekatrade, Keytrade, Helm.

Duties/Tariffs: Not applicable.

Notional Assessment: When no confirmed sales are reported, delivered values in India are used for netback

calculations.

Background: Price series launched November 2013.

Morocco 19-38-0-7

Grade: NPS 19-38-0-7

Price basis: FOB

Credit/Payment terms: Typically cash payment

Packaging: Bulk

Loading Location: Jorf Lasfar, Morocco

Type: Mainly reflects NPS shipment prices to Ethiopia under yearly tender process but also

includes other monthly spot sales.



Currency: US dollar Weight Unit: Metric tonne

Size: Typical cargo 40-50,000 mt (Ethiopia). 5,000 mt is minimum size for assessment

Timing: Typically 30 days forward.

Main consumer market: Ethiopia

Pricing: Reflects largely netback FOB levels from tender prices for Ethiopia (which buys on a

yearly basis) or spot sales to any other markets

Duties/Tariffs: Not applicable

Notional Assessment: In the absence of business, firm bids and offers to be incorporated into assessment if

two weeks of market inactivity, with an "Indicative Price" notation. If no bids or offers reported, it is to be assessed based on the MAP FOB Baltic/Black Sea price assessment. A "No Recent Business" may be applied if no firm bids or offers. As a key benchmark, a "no market" with null values very rarely applies, unless production is shut down for four

weeks or more.

Background: Price series launched November 2016 to reflect increase in NPK/NPS sales from

Morocco.

Morocco 12-46-0-7

Grade: NPS 12-46-0-7

Price basis: FOB

Credit/Payment terms: Typically cash payment

Packaging: Bulk 49

Loading Location: Jorf Lasfar, Morocco

Type: Mainly reflects spot sales to Brazil

Currency: US dollar Weight Unit: Metric tonne

Size: Typical cargo 10-20,000 mt in combination cargoes. 5,000 mt is minimum size for

assessment

Timing: Typically 30 days forward.

Main consumer market: Brazil

Pricing: Reflects largely netback FOB levels from CFR prices in Brazil.

Duties/Tariffs: Duty rate remains at 0%

Notional Assessment: In the absence of business, firm bids and offers to be incorporated into assessment if

two weeks of market inactivity, with an "Indicative Price" notation. If no bids or offers reported, it is to be assessed based on the MAP FOB Baltic/Black Sea price assessment. A "No Recent Business" may be applied if no firm bids or offers. As a key benchmark, a "no market" with null values very rarely applies, unless production is shut down for four

weeks or more.

Background: Price series launched November 2016 to reflect increase in NPK/NPS sales from

Morocco.

Morocco 15-15-15

Grade: NPK 15-15-15

Price basis: FOB

Credit/Payment terms: Typically cash payment

Packaging: Bulk

Loading Location: Jorf Lasfar, Morocco
Type: Reflects spot/contract sales

Currency: US dollar Weight Unit: Metric tonne

Size: Typical cargo 10-20,000 mt (Europe/Brazil), 30,0000 mt (West Africa). 5,000 mt is

minimum size for assessment

Timing: Typically 30 days forward. Main consumer markets: Europe, Brazil, West Africa

Pricing: Reflects largely netback FOB levels from spot CFR sales to West Africa, Brazil or European

markets

Duties/Tariffs: Duty rate remains at 0% for Brazil



Notional Assessment: In the absence of business, firm bids and offers to be incorporated into assessment if

two weeks of market inactivity, with an "Indicative Price" notation. If no bids or offers reported, it is to be assessed based on the MAP FOB Baltic/Black Sea price assessment. A "No Recent Business" may be applied if no firm bids or offers. As a key benchmark, a "no market" with null values very rarely applies, unless production is shut down for four

weeks or more.

Background: Price series launched November 2016 to reflect increase in NPK/NPS sales from

Morocco.

NPKS - CFR

China 16-16-16

Grade: NPK 16-16-16. Prilled material with K2O content from KCl

Price basis: CFR

Credit/Payment terms: Typically cash payment

Packaging: bulk

Loading Location: Typically Muuga, Klaipeda and Yuzhny

Type: Long term contracts priced via formula, but also spot deals.

Currency: US dollar Weight Unit: Metric tonne

Size: Typical cargo 25-30,000 mt. 10,000 mt is minimum size for assessment.

Timing: Prompt to four weeks forward

Pricing: Derived from reported sales by producers such as Acron and Phosagro. Traders active in

the trade include Yara, Mekatrade, Keytrade, Helm.

Duties/Tariffs: Not applicable.

Notional Assessment: In the absence of business, firm bids and offers to be incorporated into assessment if

two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent

Business" may be applied if no firm bids or offers.

Background: Price series launched November 2013.

Southeast Asia 16-16-16

Grade: NPK 16-16-16. Prilled material with K2O content from KCl

Price basis: CFR

Credit/Payment terms: Typically cash payment

Packaging: bulk

Loading Location: Typically Muuga, Klaipeda and Yuzhny

Type: Long term contracts priced via formula, but also spot deals.

Currency: US dollar Weight Unit: Metric tonne

Size: Typical cargo 25-30,000 mt. 10,000 mt is minimum size for assessment.

Timing: Prompt to four weeks forward

Pricing: Derived from reported sales by producers such as Acron and Phosagro. Traders active in

the trade include Yara, Mekatrade, Keytrade, Helm.

Duties/Tariffs: Not applicable.

Notional Assessment: In the absence of business, firm bids and offers to be incorporated into assessment if

two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent

Business" may be applied if no firm bids or offers.

Background: Price series launched November 2013. 50

India 10-26-26

Grade: NPK 10-26-26. Prilled material with K2O content from KCl

Price basis: CFR

Credit/Payment terms: Typically cash payment

Packaging: bulk

Loading Location: Typically Muuga, Klaipeda and Yuzhny

Type: Long term contracts priced via formula, but also spot deals.

Currency: US dollar



Weight Unit: Metric tonne

Size: Typical cargo 30-40,000 mt depending on destination. 10,000 mt is minimum size for

assessment.

Timing: Prompt to four weeks forward

Pricing: Derived from reported sales by producers such as Acron and Phosagro. Traders active in

the trade include Yara, Mekatrade, Keytrade, Helm.

Duties/Tariffs: Not applicable.

Notional Assessment: In the absence of business, firm bids and offers to be incorporated into assessment if

two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent

Business" may be applied if no firm bids or offers.

Background: Price series launched November 2013.

Brazil 12-46-0-7

Grade: NPS 12-46-0-7

Price basis: CFR

Credit/Payment terms: Typically cash payment

Packaging: Bulk

Delivery Location: Typically Paranagua, Rio Grande, Aratu, Santos, Vitoria and Itaqui

Type: Monthly spot sales

Currency: US dollar Weight Unit: Metric tonne

Size: Typical cargo 10-20,000 mt. 5,000 mt is minimum size for assessment

Timing: Typically 30 days forward.

Key Supply Sources: OCP/Morocco

Pricing: Derived from reported sales by OCP into the Brazilian market to buyers such as Fertipar,

Heringer and Yara

Duties/Tariffs: Duty rate remains at 0%

Notional Assessment: In the absence of business, firm bids and offers to be incorporated into assessment if

two weeks of market inactivity, with an "Indicative Price" notation. If no bids or offers reported, it is to be assessed based on the MAP FOB Baltic/Black Sea price assessment. A "No Recent Business" may be applied if no firm bids or offers. As a key benchmark, a "no market" with null values very rarely applies, unless production is shut down for four

weeks or more.

Background: Price series launched November 2016 to reflect increase in NPK/NPS sales from

Morocco.

West Africa 15-15-15

Grade: NPK 15-15-15

Price basis: CFR

Credit/Payment terms: Typically cash payment

Packaging: Bulk

Delivery Location: Typically Dakar, Abidjan, Lagos and Kpeme

Type: Monthly spot sales

Currency: US dollar Weight Unit: Metric tonne

Size: Typical cargo 20-30,000 mt. 5,000 mt is minimum size for assessment

Timing: Typically 30 days forward. Key Supply Sources: OCP/Morocco, Yara

Pricing: Derived from reported sales into the West African market buyers. Traders active in the

market include Yara, Mekatrade, Keytrade and Helm.

Duties/Tariffs: Not applicable

Notional Assessment: In the absence of business, firm bids and offers to be incorporated into assessment if

two weeks of market inactivity, with an "Indicative Price" notation. If no bids or offers reported, it is to be assessed based on the MAP FOB Baltic/Black Sea price assessment. A "No Recent Business" may be applied if no firm bids or offers. As a key benchmark, a "no market" with null values very rarely applies, unless production is shut down for four

weeks or more.



Background: Price series launched November 2016 to reflect increase in NPK purchasing from West

Africa.

India 20-20-0-13

Grade: NPS 20-20-0-13

Price basis: CFR

Credit/Payment terms: Typically cash payment

Packaging: Bulk

Loading Location: Typically Indonesia, Muuga, Klaipeda and Yuzhny

Type: Long term contracts priced via formula, but also spot deals.

Currency: US dollar Weight Unit: Metric tonne

Size: Typical cargo 20-30,000 mt depending on destination. 5,000 mt is minimum size for

assessment.

Timing: Prompt to four weeks forward

Pricing: Derived from reported sales by producers such as Petrokimia Gresik, Acron and

Phosagro.

Duties/Tariffs: Not applicable.

Notional Assessment: In the absence of business, firm bids and offers to be incorporated into assessment if

two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent

Business" may be applied if no 51

firm bids or offers.

Background: Price series launched November 2016.

NPKs - CPT

France 17-17-17

Grade: NPK 17-17-17 chloride based Price basis: CPT distributors' warehouses

Credit/Payment terms: Transfer at sight. Up to 30 days credit granted.

Packaging: bulk

Loading Location: Ex indigenous NWE plants, and from main import terminals in France and Benelux. Type: Spot and contract. Prices fixed at regular intervals by producers and importers.

Currency: euro

Weight Unit: Metric tonne Size: 25-2,500 mt

Timing: Spot to six weeks forward

Pricing: Derived from producer and importer sales to distributors, as well as terminal operators.

Distributors and Cooperatives are consulted for verification.

Duties/Tariffs: Not applicable.

Notional Assessment: In the absence of business, firm bids and offers may be incorporated into assessment if

two weeks of market inactivity.

Background: Price series launched May 2006.

NPKs - CPT BAGGED

UK 20-10-10

Grade: NPK 20-10-10 chloride based Price basis: CPT distributors' warehouses

Credit/Payment terms: Transfer at sight. Up to 30 days credit granted.

Packaging: bagged

Loading Location: Ex indigenous UK plants, and from main import terminals in UK

Type: Spot and contract. Prices fixed at regular intervals by producers and importers.

Currency: pound sterling
Weight Unit: Metric tonne
Size: 25-1,000 mt

Timing: Spot to six weeks forward



Pricing: Derived from producer and importer sales to distributors, as well as terminal operators.

Distributors and Cooperatives are consulted for verification.

Duties/Tariffs: Not applicable.

Notional Assessment: In the absence of business, firm bids and offers may be incorporated into assessment if

two weeks of market inactivity.

Background: Price series launched May 2006.

NPKs - CIF

Germany 15-15-15

Grade: NPK 15-15-15 chloride based
Price basis: CIF inland river/canal ports by barge

Credit/Payment terms: Transfer at sight. Up to 30 days credit granted.

Packaging: bulk

Loading Location: Ex indigenous NWE plants, and from main import terminals in Germany and Benelux. Type: Spot and contract. Prices fixed at regular intervals by producers and importers.

Currency: euro

Weight Unit: Metric tonne
Size: 1,000-2,500 mt

Timing: Spot to six weeks forward

Pricing: Derived from producer and importer sales to distributors, as well as terminal operators.

Distributors and Cooperatives are consulted for verification.

Duties/Tariffs: Not applicable.

Notional Assessment: In the absence of business, firm bids and offers may be incorporated into assessment if

two weeks of market inactivity.

Background: Price series launched May 2006.

NPKs - EXW

China 15-15-15 S

Grade: SOP-based NPK with 15-15-15 nutrient ratio
Price basis: EXW - truck or railway car at producer's plant

Credit/Payment terms: Remittance in advance or settlement after distributors sold the cargo, depending on the

supply & demand situation of current domestic market.

Packaging: bulk

Loading Location: at producer's plant

Type: Most orders are place before the two major buying seasons in spring & autumn started.

Distributors also build the stock in off season when price close to bottom or replenish

their stock during the buying season.

Currency: renminbi
Weight Unit: metric tonne

Size: normally 1,000 mt or above
Timing: 2 or 3 days to a week forward
Main Consumer Markets: Most regions throughout China

Pricing: Prices and settlement method are adjusted by market situation. In most actual cases,

producers would quote a delivered price to the railway station at buyer's 52

location. Deducting railway freight rate, it netback the ex factory price.

Duties/Tariffs: Not applicable.

Notional Assessment: In the absence of business, firm bids and offers may be incorporated into assessment if

two weeks of market inactivity.

Background: Price series launched May 2008.

China 15-15-15 CL

Grade: Chloride-based NPK with 15-15-15 nutrient ratio
Price basis: EXW - truck or railway car at producer's plant

Credit/Payment terms: Remittance in advance or settlement after distributors sold the cargo, depending on the

supply & demand situation of current domestic market.



Packaging: bulk

Loading Location: at producer's plant

Type: Most orders are placed before the two major buying seasons in spring & autumn started.

Distributors also replenish stock during the ploughing season.

Currency: renminbi
Weight Unit: metric tonne

Size: normally 500 mt or above
Timing: 2 or 3 days to a week forward

Main Consumer Markets: Chloride-based NPK are sold throughout the entire company but fertilizer with chloride

are not for Xinjiang market.

Pricing: Prices and settlement method are adjusted by market situation. In most actual cases,

producers would quote a delivered price to the railway station at buyer's location.

Deducting railway freight rate, it netback the ex-factory price.

Duties/Tariffs: Not applicable.

Notional Assessment: In the absence of business, firm bids and offers may be incorporated into assessment if

two weeks of market inactivity.

Background: Price series launched May 2008.

POTASH FOB STANDARD MOP – FOB BUL

Vancouver

Grade: Minimum 60% by weight potash content (as K2O) standard grade. Formula KCI

(potassium chloride). Material mainly less than 1.7mm in size and above 0.25mm.

Price basis: FOB

Credit/Payment terms: No FOB sales, all concluded on a CFR basis.

Packaging: bulk
Loading Location: Vancouver.

Type: All types of contract and spot business.

Currency: US dollar Weight Unit: metric tonne

Size: Usually 30-60,000 mt for deliveries beyond North America; less for regional shipments.

Timing: Based on current CFR prices.

Key Supply Sources: Saskatchewan Duties/Tariffs: None.

Main Consumer Markets: Latin America, US, India, China, Southeast Asia.

Pricing: Assessed by calculating the netback against CFR sales to key consumer markets such as

India, China and Southeast Asia.

Notional Assessment: Not applicable because of prices in long-term contracts with India and China. As a key

benchmark, a "no market" with null values rarely applies, unless production is shut down

for four weeks or more.

Background: Price series launched March 1997.

Jordan/Israel - standard

Grade: Minimum 60% by weight potash content (as K2O) standard grade. Formula KCI

(potassium chloride). Material mainly less than 1.7mm in size and above 0.25mm.

Price basis: FOB

Credit/Payment terms: No FOB sales, all concluded on a CFR basis.

Packaging: bulk

Loading Location: Eilat, Israel and Aqaba, Jordan on the Red Sea. Type: All types of contract and spot business.

Currency: US dollar
Weight Unit: metric tonne
Size: 15,000-60,000 mt.

Timing: Based on current CFR prices.

Main Consumer Markets: India, China, Southeast Asia, Brazil. Jordan also supplies Europe; Israel's ICL owns

European capacity.



Duties/Tariffs: None.

Pricing: Assessed by calculating the netback against CFR sales to key consumer markets such as

India, China and Southeast Asia. Israeli producer ICL exports from Eilat and Jordanian

producer APC from Agaba.

Notional Assessment: Not applicable because of prices in long-term contracts with India and China. As a key

benchmark, a "no market" with null values rarely applies, unless production is shut down

for four weeks or more.

Background: Price series launched March 1997.

Baltic Sea

Grade: Minimum 60% by weight potash content (as K2O) standard grade. Formula KCI

(potassium chloride). Material mainly less than 1.7mm in size and above 0.25mm.

Price basis: FOE

Credit/Payment terms: No FOB sales, all concluded on a CFR basis.

Packaging: bulk 53

Loading Location: St Petersburg, Klaipeda and Ventspils. Type: All types of contract and spot business.

Currency: US dollar
Weight Unit: metric tonne
Size: 15,000-60,000 mt.

Timing: Based on current CFR prices.

Main Consumer Markets: Latin America, US, India, China, Southeast Asia and Europe.

Duties/Tariffs: none.

Pricing: Assessed by calculating the netback against CFR sales to key consumer markets such as

India, China and Southeast Asia.

Notional Assessment: Not applicable because of prices in long-term contracts with India and China. As a key

benchmark, a "no market" with null values rarely applies, unless production is shut down

for four weeks or more.

Background: Price series launched March 1997.

US Carlsbad

Grade: 0-0-60 standard

Price basis: FOB
Credit/Payment terms: Cash/sight
Packaging: bulk

Loading Location: Mines in New Mexico and Utah

Type: Spot

Currency: US dollar (for US buyers)

Weight Unit: short tons

Size: 25 st trucks or 100 st rail cars

Timing: Generally product to ship within two weeks.

Key Supply Sources: Mines owned and operated by Intrepid Potash and Mosaic.

Duties/Tariffs: Not applicable.

Pricing: Largely reflects sales by Intrepid and Mosaic (which also produces powdered product).

Notional Assessment: Price can be inferred from US Midwest and Southern Plains markets.

Background: Price series launched July 2006.

POTASH FCA STANDARD

China port wholesale

Grade: Minimum 60% by weight potash content (as K20) standard grade. Formula KCI

(potassium chloride). Material mainly less than 1.7mm in size and above 0.25mm.

Price basis: FCA ex-port warehouse. Credit/Payment terms: Typically cash payment.

Packaging: typically 50kg/bag (loaded from bulk, packed in ports)
Loading OR Delivery Location: Qingdao, Lianyungang, Zhanjiang, Chiwan, Fangcheng.

Type: spot sales.



Currency: renminbi
Weight Unit: metric tonne

Size: Depend on buyers' option, 50-100 mt minimum.

Timing: two to seven days forward.

Key Supply Sources: Sinofert and CNAMPGC.

Pricing: Largely reflects the sales by Sinofert and CNAMPGC in domestic market.

Duties/Tariffs: 0%.

Notional Assessment: In the absence of business, firm bids and offers to be incorporated into assessment. A

"no market" with null values rarely applies, unless production is shut down for four

weeks or more.

Background: Price series launched April 2011.

POTASH CFR STANDARD

China

Grade: Minimum 60% by weight potash content (as K2O) standard grade. Formula KCI

(potassium chloride). Material mainly less than 1.7mm in size and above 0.25mm.

Price basis: CFR

Credit/Payment terms: Letter of Credit

Packaging: bulk

Delivery Location: Qingdao, Lianyungang, Zhanjiang, Chiwan and Fangcheng. Type: Semi-annual contracts since 2011; annual previously.

Currency: US dollar
Weight Unit: metric tonne
Size: 15.000-60.000 mt.

Timing: Price announced by suppliers and buyers in quarter before contract begins but typically

45 days forward ex-Canada and 30 days forward ex-Russia/ Belarus.

Key Supply Sources: BPC/Russia/Belarus, Canpotex/ Canada, ICL/Israel, APC/Jordan, K+S/Germany.

Pricing: Reflects Chinese importers purchases typically on a CFR basis. Price of seaborne import

contracts for current period. One of the main suppliers to conclude a contract announces a price which becomes the new contract price benchmark for the period, as all the

others follow suit.

Duties/Tariffs: import tariff: 1%

Notional Assessment: Not applicable because of prices in long-term contracts. Background: Price series launched March 1997. India 180 days

India 180 days

Grade: Minimum 60% by weight potash content (as K2O) standard grade. Formula KCI

(potassium chloride). Material mainly less than 1.7mm in size and above 54 0.25mm.

Price basis: CFR

Credit/Payment terms: 180 days credit.

Packaging: bulk

Delivery Location: Various ports on the east and west coasts.

Type: Six-month contracts from 2011/2012; annual previously. Based on India's financial year

(April-March).

Currency: US dollar
Weight Unit: metric tonne
Size: 15,000-60,000 mt.

Timing: Contract prices are typically announced by the international suppliers in the quarter

ahead of the start of the contract, unless as in 2011-12 there is no agreement and the

price announcement and shipments were delayed.

Key Supply Sources: BPC/Russia/Belarus, Canpotex/ Canada, ICL/Israel, APC/Jordan and to a lesser extent

K+S/Germany.

Notional Assessment: Not applicable because of prices in long-term contracts.



Pricing: One of the main suppliers to conclude a contract announces a price which becomes the

new contract price benchmark for the period, as all the others follow suit. Occasional

tender awards also incorporated into the assessment.

Duties/Tariffs: none.

Background: Price series launched March 1997.

Southeast Asia

Grade: Minimum 60% by weight potash content (as K20) standard grade. Formula KCI

(potassium chloride). Material mainly less than 1.7mm in size and above 0.25mm.

Price basis: CFR

Credit/Payment terms: Cash/sight. Packaging: bulk

Delivery Locations: Largest markets are Indonesia and Malaysia but Thailand, Vietnam and Philippines are

active buyers.

Type: Spot.
Currency: US dollar
Weight Unit: metric tonne
Size: 5,000 mt-60,000 mt.

Timing: reflects usually quarterly, announced by suppliers, often BPC. Prices can nevertheless

vary in the spot market due to inventory fluctuations. Shipping times are about three

weeks from Vancouver and the Baltic and about 10 days from the Red Sea.

Key Supply Sources: BPC/Russia/Belarus, Canpotex/ Canada, ICL/Israel, APC/Jordan and to a lesser extent

K+S/Germany.

Pricing: Reflects mainly spot business concluded by the top three suppliers BPC/Russia/Belarus,

Canpotex/ Canada and APC/Jordan.

Duties/Tariffs: None.

Notional Assessment: In the absence of business, firm bids and offers to be incorporated into assessment if

three weeks of market inactivity.

Background: Price series launched March 1997.

POTASH CFR STANDARD

China/Russia cross-border

Grade: Minimum 60% by weight potash content (as K2O) standard grade. Formula KCI

(potassium chloride). Material mainly less than 1.7mm in size and above 0.25mm.

Price basis: CPT

Credit/Payment terms: Letter of Credit or Prepayment, sometimes cash on delivery.

Packaging: bulk

Delivery Location: Manzhouli (Inner Mongolia) / Suifenhe (Heilongjiang Province) / Erlianhot (Inner

Mongolia) / Alashankou (Xinjiang AR). More than 80% at Suifenhe in Heilongjiang

province and Manzhouli in Inner Mongolia.

Type: monthly spot sales

Currency: US dollar Weight Unit: metric tonne

Size: Typically 63 mt per railcar and 1,500-2,500 mt per train.

Timing: two weeks by rail Main Consumer Markets: Western China.

Notional Assessment: If either buyers or suppliers stopped the business temporarily, a 'no market' notation will

be applied.

Pricing: Reflects the sales of Uralkali/Russia by rail on a DAF basis to China. Main players are

Chinese cross-border MOP importers, especially Suifenhe Longsheng, Sinofert and

CNAMPGC.

Duties/Tariffs: import tariff 1% Background: Since April 2011.



POTASH FOB GRANULAR

Vancouver

Grade: Minimum 60% by weight potash content (as K2O) granular grade. Formula KCI

(potassium chloride). Granular is MOP in pellet form mainly above 1mm in size and less

than 3.35mm.

Price basis: FOB

Credit/Payment terms: No FOB sales, all concluded on a CFR basis.

Packaging: bulk
Loading Location: Vancouver.

Type: All types of contract and spot business.

Currency: US dollar 55 Weight Unit: metric tonne

Size: Usually 30-60,000 mt for deliveries beyond North America; less for regional shipments.

Timing: Based on current CFR prices.

Key Supply Sources: Saskatchewan.

Duties/Tariffs: None.

Main Consumer Markets: Latin America, US, India, China, Southeast Asia and Europe.

Pricing: Assessed by calculating the netback against CFR sales to key consumer markets such as

Brazil, India, China and Southeast Asia. The premium of granular over standard MOP is

typically \$15/mt.

Notional Assessment: Not applicable because of prices in long-term contracts with India and China.

Background: Price series launched March 1997.

Baltic Sea

Grade: Minimum 60% by weight potash content (as K2O) granular grade. Formula KCI

(potassium chloride). Granular is MOP in pellet form mainly above 1mm in size and less

than 3.35mm.

Price basis: FOB

Credit/Payment terms: No FOB sales, all concluded on a CFR basis.

Packaging: bulk

Loading Locations: St Petersburg, Klaipeda and Ventspils. Type: All types of contract and spot business.

Currency: US dollar
Weight Unit: metric tonne
Size: 15,000-60,000 mt.

Timing: Based on current CFR prices.

Main Consumer Markets: Latin America, US, India, China, Southeast Asia and Europe.

Pricing: Assessed by calculating the netback against CFR sales to key consumer markets such as

Brazil, India, China and Southeast Asia. The premium of granular over standard MOP is

typically \$15/mt.

Duties/Tariffs: none.

Notional Assessment: Not applicable because of prices in long-term contracts with India and China.

Background: Price series launched July 2006.

US Carlsbad

Grade: Granular 0-0-60

Price basis: FOB
Credit/Payment terms: Cash/sight
Packaging: bulk

Loading: Mines in New Mexico and Utah

Type: Spot

Currency: US dollar (for US buyers)

Weight Unit: short tons

Size: 25 st trucks or 100 st rail cars

Timing: Generally product to ship within two weeks.

Key Supply Sources: Mines owned and operated by Intrepid Potash and Mosaic.

Duties/Tariffs: Not applicable.



Pricing: Largely reflects sales by Intrepid and Mosaic. Mosaic mine and plant at Carlsbad NM

producers K-Mag® specialty potash product mostly.

Notional Assessment: Sometimes price can be inferred from US Midwest and Southern Plains markets.

Background: Price series launched July 2006.

Saskatchewan

Grade: Granular 0-0-60

Price basis: FOB
Credit/Payment terms: Cash/sight
Packaging: bulk

Loading: Mines in Saskatchewan, Canada

Type: Spot

Currency: US dollar (for US buyers)

Weight Unit: short tons (despite Canadian location, price point only cited for sales to US).

Size: 100 st

Timing: Generally product to ship within two weeks.

Key Supply Sources: Mines owned and operated by Agrium, Mosaic and PotashCorp.

Pricing: Producer price lists, communication with independent distributors in the US domestic

markets. The same mines supply exports through Vancouver BC.

Duties/Tariffs: None.

Notional Assessment: Price can be inferred from US Midwest. However, most product sold for forward delivery

rather than spot prompt.

Background: Price series launched July 1990.

US New Orleans barge

Grade: Granular 0-0-60

Price basis: FOB
Credit/Payment terms: Cash/sight
Packaging: bulk

Loading: Imports discharging at Mississippi River terminals.

Type: Spot

Currency: US dollar (for US buyers)

Weight Unit: short tons Size: 1,500 st

Timing: Generally product delivered within two weeks.

Key Supply Sources: Russia, Belarus, Israel.

Pricing: Business reported by producers, importers, and domestic endusers along the Mississippi

River system.

Duties/Tariffs: None.

Notional Assessment: The price can be inferred from US Midwest and Southern Plains markets in the absence

of 56 new spot business, but only when the upper Mississippi River system is open.

Background: Price series launched May 2008.

US Midwest East

Grade: Granular 0-0-60

Price basis: FOB
Credit/Payment terms: Cash/sight.
Packaging: bulk

Loading: River terminals and inland warehouses primarily in Illinois, Indiana, Michigan, Ohio and

Kentucky.

Type: Spot
Currency: US dollar
Weight Unit: short tons
Size: Typically 25 st.

Timing: Prompt business generally calls for delivery within two weeks.

Key Supply Sources: Product is sold from producers' warehouses and independent distributors to retailers.

Pricing: Communications with main players including producers, traders and up-river

distributors.



Duties/Tariffs: Not applicable

Notional Assessment: Very rare occurrence, bid and offer spreads between distributors and retailers or other

suppliers can be useful in the absence of new business.

Background: Most product enters the region by barge or rail, before being distributed by the

truckload. Price series launched July 1990.

US Midwest West

Grade: Granular 0-0-60

Price basis: FOB
Credit/Payment terms: Cash/sight.
Packaging: bulk

Loading: River terminals and inland warehouses primarily in Iowa, Nebraska, Minnesota.

Type: Spot
Currency: US dollar
Weight Unit: short tons
Size: Typically 25 st.

Timing: Prompt business generally calls for delivery within two weeks.

Key Supply Sources: Product is sold from producers' warehouses and independent distributors to retailers.

Pricing: Communications with main players including producers, traders and up-river

distributors.

Duties/Tariffs: Not applicable

Notional Assessment: Bid and offer spreads between distributors and retailers or other suppliers can be useful

in the absence of new business.

Background: Most product enters the region by barge or rail, before being distributed by the

truckload. Price series launched July 1990.

US South

Grade: Granular 0-0-60

Price basis: FOB
Credit/Payment terms: Cash/sight.
Packaging: bulk

Loading: River terminals and inland warehouses south of Mason-Dixon and on both sides of the

Mississippi River.

Type: Spot
Currency: US dollar
Weight Unit: st (sort tons)

Size: 25 st trucks and 100 st railcars.

Timing: Prompt business generally calls for delivery within two weeks.

Key Supply Sources: Product is sold from producers' warehouses and independent distributors to retailers.

Pricing: Communications with main players including producers, traders and up-river

distributors.

Duties/Tariffs: Not applicable

Notional Assessment: Bid and offer spreads between distributors and retailers or other suppliers can be

employed in the absence of new business.

Background: Most potash enters the region by barge or rail, before being distributed by the truckload

or railcars. Price series launched January 1998.

POTASH CFR GRANULAR

Brazil

Grade: Minimum 60% by weight potash content (as K2O) granular grade. Formula KCI

(potassium chloride). Granular is MOP in pellet form mainly above 1mm in size and less

than 3.35mm.

Price basis: CFR
Credit/Payment terms: Cash/sight.
Packaging: bulk

Delivery Location: Mainly Paranagua, Santos and Rio Grande.



Type: Spot.
Currency: US dollar
Weight Unit: metric tonne
Size: 15,000-60,000 mt.
Timing: Typically 30 days forward.

Key Supply Sources: Canada, Russia, Belarus, Israel and to a lesser extent Germany.

Pricing: Reflects sales concluded on a CFR basis largely from key suppliers to the country

BPC/Russia/Belarus, Canpotex/Canada, ICL/Israel and K+S/Germany. Applies on current

deliveries, with range applied to reflect differing pricing for large and small lots.

Duties/Tariffs: None 57

Notional Assessment: Firm bids and offers are used in the absence of new business.

Background: Price series launched March 1997.

POTASH CIF GRANULAR

NW Europe

Grade: Minimum 60% by weight potash content (as K2O) granular grade. Formula KCI

(potassium chloride). Granular is MOP in pellet form mainly above 1mm in size and less

than 3.35mm.

Price basis: CIF

Credit/Payment terms: Cash/sight. Packaging: bulk

Loading location: Northwest European ports

Type: spot, monthly and quarterly contracts

Currency: euro

Weight Unit: metric tonne
Size: Ship, railcar and truck.

Size: Ship, railcar and truck.
Timing: Typically 30 days forward.

Key Supply Sources: Mainly Germany and to a lesser extent Russia, Belarus and Jordan.

Pricing: Largely reflects spot and short-term contract sales concluded by K+S on a CIF basis, with

other suppliers following suit.

Duties/Tariffs: none.

Notional Assessment: Firm bids and offers are used in the absence of new business.

Background: Price series launched July 2007.

POTASH FOB GRANULAR

US Midwest barge

Grade: Granular 0-0-60

Price basis: FOB
Credit/Payment terms: Cash/sight.
Packaging: bulk

Delivery Locations: River terminals and inland warehouses primarily in Iowa, Minnesota, Illinois, Indiana,

Michigan, and Ohio.

Type: Spot
Currency: US dollar
Weight Unit: short tons
Size: 1,500 st.

Timing: Prompt business generally calls for delivery within two weeks.

Key Supply Sources: Barges loading from the US Gulf.

Pricing: Communications with main players including producers, traders and up-river

distributors.

Duties/Tariffs: Not applicable

Notional Assessment: Confirmed FOB New Orleans barge quotes and/or Midwest FOB prices can be used to

infer delivered barge price.



Background: Barge market has become increasingly important as the US market has been the highest

priced market in the world for several years, attracting more import tons. Price series

launched July 2007.

SOP FCA

NW Europe

Grade: Minimum 60% by weight potash content (as K2O) standard grade. Total chlorides (as CI)

maximum 2.5% by weight. Formula K2SO4 (sulphate of potash). Material mainly less

than 1.7mm in size and more than 0.25mm.

Price basis: FCA
Credit/Payment terms: Cash/sight.
Packaging: bulk

Loading Location: Antwerp, various in Germany

Type: spot, monthly and quarterly contracts

Currency: euro

Weight Unit: metric tonne

Size: Ship, railcar and truck.
Timing: Typically 30 days forward.
Key Supply Sources: Germany and Belgium.

Pricing: Largely reflects spot and short-term contract sales concluded by key suppliers

K+S/Germany and Tessenderlo/Belgium on a FOB/FOT basis, with other suppliers following suit. Assessed basis indications on SOP premium over MOP, the discount of

standard SOP against granular SOP and the actual reported price.

Duties/Tariffs: none

Notional Assessment: Firm bids and offers are used in the absence of new business.

Background: Price series launched January 2001.

SULPHUR FOB

US Gulf spot

Grade: Granular
Price basis: FOB
Credit/Payment terms: Sight/cash
Packaging: Bulk

Loading Location: US Gulf ports such as Beaumont and Corpus Christy

Type: Spot
Currency: US dollar
Weight Unit: metric tonne
Size: 30-35,000 mt

Timing: Typically 30 days forward 58

Main Consumer Markets: Brazil, Morocco

Duties/Tariffs: None.

Pricing: Represents netbacks on spot sales on a CFR basis to consumer markets, as well as FOB-

basis sales where relevant.

Notional Assessment: In the absence of business, firm bids and offers to be incorporated into assessment with an "Indicative Price" notation. A "No Recent Business" may be applied if no firm bids or offers. A "no market" with null

values is posted with four or more of market inactivity.

Background: Price series launched May 2017

Vancouver - spot

Grade: Granular
Price basis: FOB
Credit/Payment terms: Sight/cash
Packaging: bulk
Loading Location: Vancouver
Type: Spot



Currency: US dollar Weight Unit: metric tonne

Size: typically 50-60,000 mt
Timing: typically 30 days forward
Main Consumer Markets: China, Brazil and South Africa.

Duties/Tariffs: None.

Pricing: Represents netbacks on spot sales on a CFR basis from key producers and marketing

firms such as Shell, Petrosul and Husky to all overseas destinations, though primarily major phosphate buyers (and international traders selling product) into China (key ports of Nantong and Qingdao) and Brazil (key ports of Paranagua, Rio Grande and Santos). In the absence of business, firm bids and offers to be incorporated into assessment if

two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent

Business" may be applied if no firm bids or offers. A "no market" with null values is

posted with four weeks or more of market inactivity.

Background: Price series launched August 1996.

Vancouver Six Month Contract

Notional Assessment:

Grade: Granular **FOB** Price basis: Credit/Payment terms: Sight/cash Packaging: bulk Loading Location: Vancouver Type: Contract Currency: US dollar Weight Unit: metric tonne

Size: typically 50-60,000 mt
Timing: typically 30 days forward
Main Consumer Markets: China, Brazil and South Africa.

Duties/Tariffs: None.

Pricing: Represents netbacks on contract business on a CFR basis from key producers Petrosul,

Shell and Husky to a number of overseas destinations such as Foskor in South Africa. Few

six month contracts now in light of increased volatility in market.

Notional Assessment: Prior quarter's price stands until new price agreed.

Background: Price series launched April 2003.

Vancouver Quarterly Contract

Grade: Granular Price basis: **FOB** Credit/Payment terms: Sight/cash Packaging: bulk Loading Location: Vancouver Contract Type: Currency: US dollar Weight Unit: metric tonne

Size: typically 30-35,000 mt
Timing: typically 30 days forward
Main Consumer Markets: China, Brazil and South Africa.

Duties/Tariffs: None.

Pricing: Represents netbacks on contract business on a CFR basis from key producers Petrosul,

Shell and Husky to a number of overseas destinations such as Foskor in South Africa. Has been introduced given the lack of six-month price contracts now in operation. All do

quarterly agreements.

Notional Assessment: Prior quarter's price stands until new price agreed.

Background: Price series launched November 2013.

Middle East spot

Grade: Granular and crushed-lump

Price basis: FOB



Credit/Payment terms: Sight/cash Packaging: bulk

Loading Location: Assaluyeh, Bandar Abbas, BIK, Ruwais, Shuiaiba, Ras Laffan and Jubail

Type: Spot
Currency: US dollar
Weight Unit: metric tonne

Size: typically 30-35,000 mt
Timing: Typically 30 days forward

Main Consumer Markets: India and China

Duties/Tariffs: None.

Pricing: Export tenders from Saudi Arabia's Aramco Trading, Kuwait's KPC, Qatar's Tasweeq and

UAE's ADNOC. To a far lesser extent, Iranian state companies IGCC, KHPC and PCC and Jordan's JPMC. Active 59 traders include Transammonia, Swiss Singapore, Interacid, Midgulf, and Transfert. A relatively new trader, Raintrade, a subsidiary of Gubretas, markets all sulphur for the Razi Petrochemical company. Sales concluded for non-

fertilizer use not included in the assessment.

Notional Assessment: In the absence of business, firm bids and offers to be incorporated into assessment if

two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent Business" may be applied if no firm bids or offers. A "no market" with null values is

posted with four weeks or more of market inactivity.

Background: Spot sales are mostly granular, though sometimes crushed-lump which secures a lower

price and not used to reflect main-stream sulphur prices, but can be used to establish low-end. Few firms are able to work with Iran, therefore price information could get harder to come by and should be watched closely. Price series launched June 2003.

Middle East Quarterly Contract

Grade: Granular
Price basis: FOB
Credit/Payment terms: Sight/cash
Packaging: bulk

Loading Location: Ruwais, Shuiaiba

Type: Contract
Currency: US dollar
Weight Unit: metric tonne

Size: typically 30-35,000 mt
Timing: typically 30 days forward
Main Consumer Markets: China and North Africa

Duties/Tariffs: None.

Pricing: Quarterly contracts concluded between main suppliers in region: KPC (Kuwait),

Adnoc (UAE) and phosphate buyers such as OCP and GCT in North Africa and international traders such as Transammonia, Swiss Singapore, Interacid, Mitsui and Itochu securing allocations to sell into other markets such as Indonesia/ Southeast Asia.

Notional Assessment: Prior quarter's price stands until new price agreed.

Background: Price series launched January 2000. Does not include Aramco Trading or Tasweeq, as

both producers' use monthly contract postings with customers as of January 2013.

Middle East Six Month Contract

Grade: Granular
Price basis: FOB
Credit/Payment terms: Sight/cash
Packaging: bulk

Loading Location: Ruwais, Shuiaiba

Type: Contract
Currency: US dollar
Weight Unit: metric tonne
Size: 30-35,000 mt

Timing: Typically 30 days forward Main Consumer Markets: Tunisia, Morocco



Duties/Tariffs: None.

Pricing: Semester contracts held between Middle East producers such as KPC and Adnoc and

with OCP(Morocco) and GCT (Tunisia). Producers and buyers plus key traders offer price ideas. Six-month contracts considered less desirable recently, as the sulphur market displays more volatility than in previous years. Semester prices felt too restrictive and

inflexible.

Notional Assessment: Prior quarter's price stands until new price agreed.

Background: Price series launched January 2000.

Adnoc Monthly Contract

Grade: Granular Price basis: **FOR** Credit/Payment terms: Sight/cash Packaging: bulk Loading Location: Ruwais Type: Contract Currency: US dollar Weight Unit: metric tonne Size: 30-35,000 mt

Main Consumer Markets: India Duties/Tariffs: None.

Pricing: Benchmark Middle East price that is issued on a monthly basis by UAE's Adnoc. Primarily

a contract price for consumers in India, but is used as a key indicator for other markets

and seen as a yardstick for market sentiment.

Notional Assessment: Prior quarter's price stands until new price agreed.

Background: Price series launched June 2003.

Tasweeq QSP Monthly Contract

Grade: Granular
Price basis: FOB
Credit/Payment terms: Sight/cash
Packaging: bulk
Loading Location: Ras Laffan
Type: Monthly contract

Currency: US\$ Weight Unit: mt

Size: 25-35,000 mt

Timing: typically 30 days forward

Pricing: Posted publically by Tasweeq – no negotiation

Duties/Tariffs: None

Notional Assessment: Prior month's price stands until new price agreed.

Background: Price series launched August 2013. 60

Aramco Monthly Contract

Grade: Granular
Price basis: FOB
Credit/Payment terms: Sight/cash
Packaging: bulk

Loading Location: Saudi Arabia - Jubail

Type: Contract
Currency: US dollar
Weight Unit: metric tonne
Size: 30-35,000 mt
Main Consumer Markets: China, India
Duties/Tariffs: None

Pricing: Benchmark Middle East price issued on a monthly basis by Aramco Trading in Saudi

Arabia. Price is typically released around 10th of the preceding month for the month



ahead. Price will not be updated by Fertilizer Week until the month begins. Primarily a $\,$

contract price for consumers in China. Key monthly price for contractual offtake.

Notional Assessment: Prior quarter's price stands until new price agreed.

Background: Price series launched January, 2016.

Black Sea

Grade: Granular and crushed lump

Price basis: FOB
Credit/Payment terms: Sight/cash
Packaging: bulk

Loading Location: Ust Luga and Ilychevsk

Type: Contract/Spot
Currency: US dollar
Weight Unit: metric tonne

Size: typically 30-35,000 mt
Timing: typically 30 days forward

Main Consumer Markets: North Africa, Brazil and Mediterranean

Duties/Tariffs: None.

Pricing: Sales via spot or contract from Russia's Gazprom Export/Austrofin and Kazakhstan's

Tengizchevroil (TCO) to North Africa customers (GCT and OCP), Mediterranean markets, including Israel and Jordan, and China. Supply is severely affected during winter months

with supplies drying up.

Notional Assessment: In the absence of business, firm bids and offers to be incorporated into assessment if

two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent Business" may be applied if no firm bids or offers. A "no market" with null values is

posted with four weeks or more of market inactivity.

Background: Price series launched January 2000.

Sulphur Mediterranean (excl. domestic contracts)

Grade: Granular
Price basis: FOB
Credit/Payment terms: Sight/cash
Packaging: bulk

Loading Location: Italy; Greece; Spain

Type: Spot

Currency: US dollar Weight Unit: metric tonne

Size: small lots, less than 10,000 mt. Usually from 4,000 mt due to restricted loading rates at

Italian ports such as Gela or Piombino.

Timing: Typically 30 days forward

Main consumer markets: Italy; Egypt; Turkey; Israel; Lebanon.

Duties/Tariffs: None.

Pricing: Primarily stems from sales for small lots of less than 10,000 mt by sulphur suppliers in

the region, as well as netbacks on CFR sales to destinations. European-based traders

such as Vanmar, Ameropa and Trammo are active players in the region.

Notional Assessment: In the absence of business, firm bids and offers to be incorporated into assessment if two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent Business" may be applied if no firm bids or offers. A "no market" with null values is posted with four weeks or more of market inactivity.

Sulphur US Gulf - spot

Grade: Granular
Price basis: FOB
Credit/Payment terms: Sight/cash
Packaging: bulk

Loading Location: Beaumont; Houston; Galveston; Corpus Christi



Type: Spot
Currency: US dollar
Weight Unit: metric tonne

Size: typically 30-40,000 mt
Timing: typically 30 days forward
Main Consumer Markets: Brazil and Morocco.

Duties/Tariffs: None.

Pricing: Represents netbacks on spot sales on a CFR basis from key producers to overseas

destinations, primarily to major phosphate buyers (and international traders selling

product) into Brazil and Morocco.

Notional Assessment: In the absence of business, firm bids and offers to be incorporated into assessment if two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent Business" may be applied if no firm bids or offers. A "no market" with null values is posted with four weeks or more of market inactivity.

SULPHUR EXW

China

Grade: Granular or lump

Price basis: EXW

Credit/Payment terms: Advanced payment, cash or credit sales.

Packaging: bulk

Loading Location: At producers' plant

Type: Spot sales
Currency: renminbi
Weight Unit: metric tonne

Size: normally 1,000 mt or above

Timing: two-to-three days to one month forward

Key Supply Sources: Mainly supplied by oil refineries owned by Sinopec and Petrochina, and Sinopec's

Puguang gas refinery.

Duties/Tariffs: Not applicable.

Pricing: Reflects sales by key producers Sinopec and Petrochina's refineries.

Notional Assessment: In the absence of business, firm bids and offers to be incorporated into assessment if

two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent Business" may be applied if no firm bids or offers. A "no market" with null values is

posted with four weeks or more of market inactivity.

Background: Price series launched May 2008.

SULPHUR FCA

China port

Grade: Granular Price basis: FCA

Credit/Payment terms: Cash payment or very short-term credit

Packaging: bulk

Loading Location: Major sea ports of sulphur import

Type: spot sales, either in bulk or whole vessel

Currency: renminbi
Weight Unit: metric tonne

Size: typically 10,000 mt to 20,000 mt

Key Supply Sources: Three key sulphur ports are Nantong, Qingdao and Fangcheng

Duties/Tariffs: Not applicable.

Pricing: Price fluctuates with market situation and assessed based on successful negotiations

between wholesalers, distributors and retailers.

Notional Assessment: In the absence of business, firm bids and offers to be incorporated into assessment if

two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent



Business" may be applied if 61 no firm bids or offers. A "no market" with null values is

posted with four weeks or more of market inactivity.

Background: Price series launched May 2008.

SULPHUR CFR

China

Grade: Granular and crushed

Price basis: CFR
Credit/Payment terms: Sight/cash
Packaging: bulk

Delivery Location: Nantong, Fangcheng and Qingdao

Type: Spot
Currency: US dollar
Weight Unit: metric tonne

Size: typically 30-60,000 mt
Timing: typically 30 days forward

Key Supply Sources: Vancouver and Middle East producers, plus Black Sea for crushed. Smaller suppliers such

as Taiwan's Formosa also supply product, as do Japan, but this is liquid.

Duties/Tariffs: None.

Pricing: Delivered product into China, price derived from information by key traders Itochu,

Mitsui, Transammonia, Swiss Singapore and Interacid, but can also be assessed by adding freight component and other related costs to the Vancouver FOB spot and Middle East spot benchmarks. One of the most watched sulphur price points as very fluid and seen as a key benchmark of the international sulphur market. Crushed assessed through

liftings by traders (Trammo) from Russia/TCO and Saudi to China.

Notional Assessment: In the absence of business, firm bids and offers to be incorporated into assessment if

two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent Business" may be applied if no firm bids or offers. A "no market" with null values is

posted with four weeks or more of market inactivity.

Background: Price series launched February 2000. As of end-2013, the methodology was amended to

incorporate crushed-lump sales at the low-end of the price assessment. This was due to

anticipated increase in crushed product sold into China from 2014.

China Quarterly Contract

Grade: Granular
Price basis: CFR
Credit/Payment terms: Sight/cash
Packaging: bulk

Delivery Location: Nantong, Fangcheng and Qingdao

Type: Contract Currency: US dollar Weight Unit: metric tonne

Size: typically 30-60,000 mt
Timing: typically 30 days forward

Key Supply Sources: Similarly to the China spot assessment, Middle East producers from Saudi Arabia, UAE,

Kuwait and Qatar primarily, combined with suppliers from Canada and Russia/FSU.

Duties/Tariffs: None.

Pricing: Contract concluded from key Middle East suppliers, Saudi Aramco, Tasweeq, Adnoc and

KPC in Middle East. Producers such as Russia's Gazprom Export/Austrofin also supply product as well as Kazakhstan's Tengizchevroil (TCO). Vancouver for Canadian suppliers. Chinese buyers since the fourth quarter of 2011 have not settled any quarterly contract via price. Instead, agreeing with supplier/trader over volume but then negotiating price

on a cargo-by-cargo basis.

Notional Assessment: Prior quarter's price stands until new price agreed.

Background: Price series launched October 2007.



India ex-Middle East

Grade: Granular/Crushed-lump

Price basis: CFR
Credit/Payment terms: Sight/cash
Packaging: bulk

Delivery Location: Paradip and Cochin key locations. Less often Vizag and Dharatmar

Type: Spot
Currency: US dollar
Weight Unit: metric tonne

Size: typically 30-35,000 mt
Timing: typically 30 days forward

Key Supply Sources: As name implies, tonnage is sourced from Middle East, namely Iran, UAE, Kuwait, Qatar

and Saudi Arabia.

Duties/Tariffs: None.

Pricing: Indian importers are main driver of this price point – another fluid price – which stems

primarily from tenders issued by major phosphate producers such as IFFCO, PPL and FACT. RCF and SPIC also take tonnes. Active Middle East-based traders are Swiss Singapore, Transfert and Midgulf amongst others. If tenders unclear results unclear, assessment can in part be be assessed by adding freight component and other related costs to the Middle East FOB benchmark. The price assessment is independent from the

Adnoc monthly contract price benchmark.

Notional Assessment: In the absence of business, firm bids and offers to be incorporated into assessment if

two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent Business" may be applied if no firm bids or offers. A "no market" with null values is

posted with four weeks or more of market inactivity. 62

Background: Price series launched January 2000.

North Africa Six Month Contract

Grade: Granular
Price basis: CFR
Credit/Payment terms: Sight/cash
Packaging: bulk

Delivery Location: Jorf Lasfar, Morocco and Gabes, Tunisia

Type: Contract
Currency: US dollar
Weight Unit: metric tonne

Size: typically 30-35,000 mt
Timing: typically 30 days forward
Main Consumer Markets: GCT/Tunisia and OCP/ Morocco

Duties/Tariffs: None.

Notional Assessment:

Pricing: Contracts settled between phosphate producers in North Africa, OCP/Morocco and

GCT/Tunisia and Middle East suppliers Adnoc and KPC and Black Sea Gazprom/Austrofin and TCO/Kazakhstan. Due to the volatile nature of the market, a number of producers are no longer engaging in six-monthly contracts, preferring instead to limit it to quarterly contracts. Therefore the price assessment also includes quarterly contract pricing.

Prior quarter's price stands until new price agreed.

Background: Price series launched January 2000.

Mediterranean (excl. domestic contracts)

Grade: Granular
Price basis: CFR
Credit/Payment terms: Sight/cash
Packaging: bulk

Delivery Location: Gabes, Tunisia; Aqaba, Jordan; Ashdod, Israel and Abu Qir, Egypt

Type: Spot
Currency: US dollar
Weight Unit: metric tonne



Size: small lots, less than 10,000 mt. Usually from 4,000 mt due to restricted loading rates at

Italian ports such as Gela or Piombino.

Timing: Typically 30 days forward

Key Supply Sources: Italy main source of granular in the Mediterranean. Spain also active supplier.

Duties/Tariffs: None

Pricing: Primarily stems from sales for small lots of less than 10,000 mt by Italian sulphur

suppliers and traders such as Prai, Nuova Solmine and Zolfital. European-based traders

such as Chemtrade and Aglobis are active players in the region.

Notional Assessment: In the absence of business, firm bids and offers to be incorporated into assessment if

two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent Business" may be applied if no firm bids or offers. A "no market" with null values is

posted with four weeks or more of market inactivity.

Background: This price point was launched February 2011 to exclude domestic contracts, namely in

Italy, as various agreements in place ensured the majority of sulphur was provided at a substantial discount compared with the rest of the Mediterranean market, therefore resulting in a wide price range deemed unacceptable as an assessment. It replaces the Mediterranean price assessment launched April 2003, which included domestic

contracts.

Mediterranean (incl. North Africa)

Grade: Granular
Price basis: CFR
Credit/Payment terms: Sight/cash
Packaging: bulk

Delivery: Gabes, Tunisia; Jorf Lasfar, Morocco; Aqaba, Jordan; Ashdod, Israel and Abu Qir, Egypt

Type: Spot
Currency: US dollar
Weight Unit: metric tonne
Size: Above 10,000 mt
Timing: Typically 30 days forward

Main Consumer Markets: Tunisia Duties/Tariffs: None.

Pricing: Similar pricing to Mediterranean small lots. Key difference between Mediterranean small

lots and Mediterranean North Africa (such as Libya) is the source of larger lots above 10,000 mt will be sourced from Middle East producers, since Italy and Spain do not have

the capacity to handle volumes above 6-7,000 mt.

Notional Assessment: In the absence of business, firm bids and offers to be incorporated into assessment if

two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent Business" may be applied if no firm bids or offers. A "no market" with null values is

posted with four weeks or more of market inactivity.

Background: Price series launched November 2010.

Brazil

Grade: Granular
Price basis: CFR
Credit/Payment terms: Sight/cash
Packaging: bulk

Delivery Location: Paranagua, Rio Grande and Santos

Type: Spot
Currency: US dollar
Weight Unit: metric tonne

Size: typically 30-40,000 mt
Timing: typically 30 days forward 63

Key Supply Sources: Middle East, Brazil and Canadian producers

Duties/Tariffs: None.

Pricing: Spot deals into Brazil from Vancouver and Middle East suppliers. Copebras and Vale

Fertilizantes are key buyers of granular grade. Traders such as Transammonia, Interacid, Swiss Singapore and Transfert are also active. During peak periods, ports can be severely



affected by logistical problems, in particular at Paranagua, with delays of up to 50-60

days.

Notional Assessment: In the absence of business, firm bids and offers to be incorporated into assessment if

two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent Business" may be applied if no firm bids or offers. A "no market" with null values is

posted with four weeks or more of market inactivity.

Background: Price series launched February 2010.

SULPHUR FOB LIQUID

US Tampa Quarterly Contract

Grade: Molten/Liquid

Price basis: FOB
Credit/Payment terms: Sight/cash
Packaging: bulk

Loading Location: Vessels from primarily from Venezuela, Texas (cross gulf barge), Mexico and Middle East.

Railcars primarily from western Canada.

Type: Annual contract negotiated on calendar basis covers volume and price, price

renegotiated quarterly.

Currency: US dollar Weight Unit: long ton

Size: Vessels 10-20,000 mt. Railcars 100 st.

Timing: As required.

Main Consumer Markets: Tampa, US Gulf, Central Florida.

Duties/Tariffs: None

Pricing: Outcomes of quarterly negotiations generally only revealed by endusers Mosaic and

PotashCorp. Priced on a Tampa or Central Florida basis for tonnes to be shipped by

vessel or by rail.

Notional Assessment: Prior quarter's price stands until new price agreed.

Background: Price series launched March 1993.

SULPHUR CPT LIQUID

NW Europe truckload Six Month Contract

Grade: Molten/Liquid

Price basis: CPT
Credit/Payment terms: Sight/cash
Packaging: bulk

Delivery Location: Sulphur buyers throughout NW Europe such as Germany, France, Belgium

Type: Contract
Currency: US dollar
Weight Unit: metric tonne

Size: typically 23-25 mt truckload

Main Consumer Markets: northwest Europe

Duties/Tariffs: None.

Pricing: Covers mainly inland road deliveries. Based on contracts between major sellers such as

Total and leading buyers including BASF, Lanxess, Prayon and Tessenderlo. Traders such as Chemtrade Aglobis and DSM are also active. Similar players to the CFR Benelux barge/railcar price assessment. Usually carries a premium of up \$30/mt on the CFR Benelux assessment due to the costlier transport method. Whilst the price point is for six-monthly contracts, the majority of buyers and sellers also incorporate quarterly

contracts as well, particularly in light of volatile commodity markets.

Notional Assessment: Prior quarter's price stands until new price agreed.

Background: Price series launched October 2002.



SULPHUR CFR LIQUID

Benelux barge/railcar Six Month Contract

Grade: Molten/Liquid

Price basis: CFR
Credit/Payment terms: Sight/cash
Packaging: bulk

Delivery Location: As the price suggests, buyers of liquid sulphur in the Benelux region

Type: Contract
Currency: US dollar
Weight Unit: metric tonne

Size: typically 1,500-2,000 mt barge; 25 mt railcar

Main Consumer Markets: Benelux Duties/Tariffs: None.

Pricing: Covers mainly inland Rhine river and rail deliveries. Based on contracts between major

sellers such as Total and leading buyers including BASF, Lanxess, Prayon and Tessenderlo. Traders such as Chemtrade Aglobis and DSM are also active. Similar players to the CPT NW Europe truckload price assessment. Whilst the price point is for six-monthly

contracts, the majority of buyers and sellers also incorporate quarterly contracts as well,

particularly in light of volatile commodity markets.

Notional Assessment: Prior quarter's price stands until new price agreed. 64

Background: Price series launched May 2002

SULPHURIC ACID FOB

NW Europe

Grade: Liquid acid 98%

Price basis: FOB

Credit/Payment terms: 30 days credit.

Loading: Hamburg, also some tanks in Rotterdam and Belgium area, Scandinavia and Spain

Type: Spot
Currency: US dollar
Weight Unit: metric tonne

Size: typically 20,000 mt. 10,000 mt minimum

Timing: 30 days forward

Main Consumer Markets: Brazil, US Gulf and Chile

Duties/Tariffs: None.

Pricing: For acid supplies out of Europe, namely Brazil, US Gulf and occasionally Chile, primarily,

but can feature spot into European destinations as well. Aurubis, Boliden plus traders Chemtrade Aglobis, Interacid, Trammo Chemtrans and Ameropa are the main players. While credit terms is currently 30 days, producers beginning to think more about 'cash against' document payment. Essentially prompt payment once product delivered. Current market is well balanced but this price point can be quiet when market is tight

and little spot available.

Notional Assessment: In the absence of business, firm bids and offers to be incorporated into assessment if

two weeks of market inactivity.

Background: Price series launched May 2002.

Japan/South Korea

Grade: Liquid acid 98%

Price basis: FOB
Credit/Payment terms: Sight/cash
Packaging: bulk

Type: Spot/Contract
Currency: US dollar
Weight Unit: metric tonne
Size: 10-20,000
Timing: 30 days forward

Main Consumer Markets: China, Chile, SE Asia and India

Duties/Tariffs:



Pricing: Information from main traders ex-Japan, Itochu, Acids Co, Mitsubishi, Marubeni as well

as Interacid, Trammo and Ameropa. Three suppliers out of Japan – PPC, Sumitomo and Mitsubishi, Acids and plus Korea Zinc and LS Nikko from South Korea. Cargoes into China

(spot and quarterly), and Chile.

Notional Assessment: In the absence of business, firm bids and offers to be incorporated into assessment if

two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent Business" may be applied if no firm bids or offers. A "no market" with null values is

posted with four weeks or more of market inactivity.

Background: Price series launched July 2012.

SULPHURIC ACID CFR

NW Europe Six-Month Contract

Grade: Liquid acid 98%

Price basis: CFR

Credit/Payment terms: 30 days credit

Packaging: bulk

Loading: Major acid suppliers such as Aurubis and Xstrata in Germany and Boliden in Scandinavia

Type: CFR Currency: euro

Weight Unit: metric tonne

Size: Usually 4,000-5000 mt Timing: 30 days forward

Main Consumer Markets: Northern France, Benelux, UK, Germany and Scandinavia.

Duties/Tariffs: None.

Pricing: Largely reflects business concluded by major producers such as Aurubis, Xstrata and

Boliden. European traders Chemtrade Aglobis and DSM are also active players. Buyers include Prayon, Roullier, Lanxess and Tessenderlo. 6-month assessment includes

quarterly price.

Notional Assessment: Prior quarter's price stands until new price agreed.

Background: Price series launched October 2010.

Turkey Spot/Contract

Grade: Liquid acid 98%

Price basis: CFR Credit/Payment terms Sight/cash

Type: spot
Currency: US dollar
Weight Unit: metric tonne

Size:

Timing: 30 days forward

Supply Sources: Bulgaria (via Aurubis), also Italy and sometimes Spain.

Duties/Tariffs: None

Pricing: RReflects spot and contract business largely concluded by Aurubis in Germany. Bagfas is

one of the key buyers.

Notional Assessment: In the absence of business, firm bids and offers to be incorporated into assessment if

two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent Business" may be applied if 65 no firm bids or offers. A "no market" with null values is

posted with four weeks or more of market inactivity.

Background: Price series launched June 2000.

Tunisia

Grade: Liquid acid 98%

Price basis: CFR
Credit/Payment terms: Sight/cash

Delivery Location:

Type: Contract Currency: US dollar



Weight Unit: metric tonne
Size: 4,000-5,000 mt
Timing: 30 days forward
Supply Sources: Italy/Spain
Duties/Tariffs: None.

Pricing: Reflects business concluded by Tunisia phosphate producer GCT. Traditionally sourced

from nearby Italian refineries. Traders Prai, Chemtrade Aglobis and Interacid are active

players.

Notional Assessment: In the absence of business, firm bids and offers to be incorporated into assessment if

two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent Business" may be applied if no firm bids or offers. A "no market" with null values is

posted with four weeks or more of market inactivity.

Notes: For the duration of 2012 and to-date 2013, it has taken very little acid due to political

and social unrest playing havoc with production.

Background: Price series launched July 2004.

US Gulf

Grade: Liquid acid 98%

Price basis: CFR
Credit/Payment terms: Sight/cash

Loading Location: Europe into Tampa.

Type: Spot
Currency: US dollar
Weight Unit: metric tonne

Size: 20,000 mt and above Timing: 30 days forward Key Supply Sources: Europe and Canada

Duties/Tariffs: None.

Pricing: Reflects business concluded by traders such as Interacid, Ameropa and Chemtrade

Aglobis. Some European suppliers also supply directly.

Notional Assessment: In the absence of business, firm bids and offers to be incorporated into assessment if

two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent Business" may be applied if no firm bids or offers. A "no market" with null values is

posted with four weeks or more of market inactivity.

Notes:

Background: Price series launched December 2008.

Brazil

Grade: Liquid acid 98%

Price basis:CFR

Credit/Payment terms: Sight/cash

Delivery Location: Paranagua, Rio Grande and Santos

Type: spot
Currency: US dollar
Weight Unit: metric tonne
Size: 12-20,000 mt
Timing: 30 days forward

Key Supply Sources: Europe: Germany, Scandinavia and Spain most commonly, though sometime Bulgaria,

and recently the occasional cargo from Chile

Duties/Tariffs: 20% for cargoes into South America

Pricing: Reflects spot business from European smelters and traders with positions.

Aurubis/Boliden and Atlantic Copper. Interacid, Ameropa busy, and recently Glencore becoming more prominent. Japanese traders rarely get involved due to high freight. Contract business rare, as Brazilian buyers cannot commit to long-term contract given the volatile phosphate market, unlike Chile, where acid is applied to leaching operations

so about 99% mining driven.

Notional Assessment: In the absence of business, firm bids and offers to be incorporated into assessment if

two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent



Business" may be applied if no firm bids or offers. A "no market" with null values is

posted with four weeks or more of market inactivity.

Background: Price series launched April 2003.

Chile

Grade: Liquid acid 98%

CFR Price basis: Credit/Payment terms: Sight/cash **Delivery Location:** Mejillones Spot Type: **US** dollar Currency: metric tonne Weight Unit: 20-30,000 mt Size: Timing: 30 days forward

Key Supply Sources: Japan traders and South Korea suppliers, and if sulphur price is equable, Two Lions

(currently only exporter of acid in China) can also sell spot to Chile.

Duties/Tariffs: None.

Pricing: Reflects business carried out by key suppliers to the country. Traders Ameropa, Mitsui,

Mitsubishi and Itochu also active. Quantum does the occasional business.

Notional Assessment: In the absence of business, firm bids and offers to be incorporated into assessment if 66

two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent Business" may be applied if no firm bids or offers. A "no market" with null values is

posted with four weeks or more of market inactivity.

Background: Price series launched December 2008.

Chile Contract

Grade: Liquid acid 98%

Price basis: CFR

Credit/Payment terms: Sight/cash
Delivery Location: Mejillones
Type: Contract
Currency: US dollar
Weight Unit: metric tonne

Size:

Timing: 30 days forward

Key Supply Sources: Japan, South Korea and China.

Duties/Tariffs: None.

Pricing: Reflects annual contract established between key acid suppliers and Codelco for leaching

operations in Chile. Other active players include Ameropa, Interacid and Trammo and Japanese traders with Chilean buyers. Seen as key acid benchmark as Chile has annual

deficit which it needs to secure.

Notional Assessment: In the absence of business, firm bids and offers to be incorporated into assessment if

two weeks of market inactivity, with an "Indicative Price" notation. A "No Recent Business" may be applied if no firm bids or offers. A "no market" with null values is

posted with four weeks or more of market inactivity.

Background: Price series launched December 2008.



Glossary of abbreviations

INCO TERM RULES FOR ANY MODE OR MODES OF TRANSPORT:

EXW - Ex-Works

FCA - Free Carrier

CPT – Carriage Paid To

CIP – Carriage and Insurance Paid To

DAT – Delivered at Terminal

DAP - Delivered at Place

DDP - Delivered Duty Paid

INCO TERM RULES FOR SEA AND INLAND WATERWAY TRANSPORT:

FAS – Free Alongside Ship

FOB - Free On Board

CFR - Cost and Freight

CIF - Cost Insurance and Freight

COUNTRY ABBREVIATIONS USED:

We use ISO 3166 alpha-2 standard country codes