

CRU Prices

Bulk Ferroalloys

Chrome

Molybdenum

Noble Alloys and

Minor Metals

Methodology and

Definitions Guide

February 2024



THE INDEPENDENT AUTHORITY
MINING | METALS | FERTILIZERS

Methodology and Definitions Guide

Scope

This guide covers prices in all geographical markets for CRU's bulk ferroalloys, chrome, molybdenum, nickel and noble alloys & minor metals assessments. It should be read in conjunction with the CRU Group Compliance Framework and Methodology Guide. It details a commodity-specific methodology which has precedence, with all other aspects covered by the Group methodology guide.

Methodology

CRU's price assessments for bulk ferroalloys, chrome, molybdenum and noble alloys & minor metals are based only on transactions. Use of transaction data alone as data inputs ensures that our assessments accurately reflect the spot market with no risk of information from sentiment, errant opinion, speculative or even confirmed, but ultimately unexecuted bids and offers entering the final published price. This approach is appropriate for prices used extensively in physical contracts.

Our methodology blends strict adherence to transaction data and other methodological rules with limited but necessary application of expert judgement, detailed below, in order to produce a price that benefits from rigour, and analyst expertise and discretion in equal measure.

Data providers

Assessments are based on regular contact with a wide network of market participants including producers, buyers, and traders at critical nodes in the supply chain. This network is constantly reviewed and maintained to seek a balance of buyers and sellers.

Data submitted and submission processes

All prices are based exclusively on transaction data (actual deals concluded) and to that extent there is no hierarchy of acceptable price types. CRU seeks to verify each deal with both parties but where this is not possible, deals will be accepted by one party of a transaction. Information relating to bids/offers or an opinion of the prevailing market price will strictly not be used in the final price assessment calculation.

Admissible price data is limited to transactions concluded at arms-length. This means a trade must be between companies who are unrelated in ownership and/or where the transaction is not part of any other arrangement. This therefore necessarily excludes intra-company transfers.

Data providers provide CRU with one or more single price figures, each relating to an individual spot deal (a sale or a purchase) concluded within a defined trading period (the period since the last assessment). Data Providers also include information such as the chemical composition, delivery date, volume and payment terms.

Producer-to-trader, producer-to-consumer, and trader-to-consumer transactions may all be included in CRU's price assessments, but no trader-to-trader (inter-trade) transactions are used in a final assessment. Market participants can submit prices to CRU by telephone, email, private one-to-one instant messenger services or other private means of communication. All price data is confidential and stored securely.

CRU seeks to ensure that its assessed prices reflect repeatable business that originates from an open inquiry to the market at large. We will scrutinise information given to us, or seek further information, in order to establish if this condition is met. If not, such data may be completely excluded from the final price assessment.

Final assessment calculation

Process

The high and low values of the published price range are established as follows:

1. All data points submitted are assessed against admissibility criteria in the relevant product specification and the criteria stated in this methodology.
 - a. Data points which meet the criteria without normalisation are determined as admissible.

- b. Data points that require normalisation and can be normalised are normalised, and the resulting data determined as admissible.
 - c. All other data points are rejected as inadmissible and will not be used in subsequent price evaluation.
 - d. Of the data points that remain, outliers (defined below) may also be rejected as inadmissible if they otherwise do not meet acceptability criteria, for example are not established as repeatable business.
2. The mid-point of remaining admissible data points is typically calculated as the volume-weighted average. In the unlikely event that a price is provided without associated volume, the average volume associated with all other trades with volumes will be used as the weighting for that price. If no prices have associated volumes, a straight average calculation will be used.
3. Expert judgement is used to establish the high and low values of the published price range by reference to the distribution of admissible data points around the mid-point and values of the lowest and highest data admissible points, in the current and prior assessment periods. Metrics such as the standard deviation may be used as a guide to this process, but not as a sole determinant of the range.
This means the high and low of the published range are not necessarily set equal to the highest and lowest admissible data points because to do so would:
 - a. Introduce excessive volatility in the high and low of the published range over time.
 - b. Define the range by individual deals which may carry little volume weight and ignore other admissible data points.

Normalisation

Data which meets the precise methodology specification is eligible for admission to the price without any adjustments. Data which does not fit the specification may still be eligible as an input to the price, but would be subject to a normalisation process in order to adjust its - primary chemical content; incoterms; loading location; vessel size; grade; duties or tariffs by the application of a premium or discount to an initial given price.

The value of this premium or discount is determined by applying one or more estimates of value-in-use or grade; freight; tariff or trade costs adjustments. Parameters used to make these adjustments are updated upon consultation with data providers. Where seen, normalisation is usually limited to adjustment for primary chemical content, deriving netbacks on incoterms and estimated or actual freight rates.

Normalisation is an essential price adjustment process used to align reported market information with a pricing methodology. Decisions to normalise a price and/or choice of values used in the normalisation process are forms of expert judgement.

Exclusion of outliers

A pricing analyst may use expert judgement in the exclusion of a data point as an input to the calculation of the final price. In doing so they would consider the range and distribution of data collected in the same timeframe from other data providers; previous data received from the same data provider; non-price information received from the data provider and the current market state from any other source. Inclusion or exclusion of input data in the final price is recorded.

Any transaction that deviates from the previous assessed price range or the collected price data for the trading period will receive extra scrutiny from a pricing analyst. For example, if a transaction is considered to be a potential outlier, supporting documentation as a means of further authentication may be asked for. Transactions may also be excluded until a transaction is established to be repeatable business. Supporting documentation is typically a contract or purchase/sales order, but other documentation may be accepted. Supporting documentation may not be asked for when, in CRU's judgement, the data is otherwise corroborated or deemed valid.

Transactions verified by both buyer and seller or authenticated with supporting documentation will normally carry more weight in a final assessment than transactions reported without any supporting documentation.

Price determination in an illiquid market

In the case that there are no submissions that meet, or after normalisation can meet, the methodology pricing definition in any price assessment time period, the previous published price will be rolled over and used as the final assessment value for the published price.

Silicon metal

For silicon metal only, the following mechanism is employed to ensure the correct relationship between grades applies at times of low market liquidity:

1. EU 98.5% Si 5-5-3 DDP

By definition of end use and purity, prices for 5-5-3 silicon metal (5-5-3) should almost always be lower than those for 4-4-1 silicon metal (4-4-1). To avoid situations where prices for 5-5-3 and 4-4-1 may become misaligned due to a lack of liquidity in the spot market, CRU uses the following mechanism to align its European silicon metal price assessments.

- If the price of 4-4-1 drops below that of 5-5-3 and there are then no new admissible transaction data for either product recorded in the following 14 days, CRU will lower the price of 5-5-3 to reflect its historical discount to 4-4-1
- The price of 5-5-3 will remain at this discount until further admissible transaction data is collected for it

The historical discount/premium between the products will be established by inspection of transaction prices over a relevant historical period determined by expert judgement. In the unlikely event that CRU receives transaction data that supports 4-4-1 being assessed below 5-5-3 at the same point in time, these levels will be maintained until there is another transaction recorded for either product. The above mechanism will then be deployed again if required.

2. EU 99% Si 4-4-1 DDP

By definition of end use and purity, prices for 5-5-3 silicon metal (5-5-3) should almost always be lower than those for 4-4-1 silicon metal (4-4-1). To avoid situations where prices for 5-5-3 and 4-4-1 may become misaligned due to a lack of liquidity in the spot market, CRU uses the following mechanism to align its European silicon metal price assessments.

- If the price of 5-5-3 rises above that of 4-4-1 and there are then no new admissible transaction data for either product recorded in the following 14 days, CRU will increase the price of 4-4-1 to reflect its historical premium to 5-5-3
- The price of 4-4-1 will remain at this premium until further admissible transaction data is collected for it

The historical discount/premium between the products will be established by inspection of transaction prices over a relevant historical period determined by expert judgement. In the unlikely event that CRU receives transaction data that supports 5-5-3 being assessed above 4-4-1 at the same point in time, these levels will be maintained until there is another transaction recorded for either product. The above mechanism will then be deployed again if required.

Expert judgement

Expert judgement may apply to decisions on whether price data submitted relates to actual deals concluded; if the deal is executed at arms-length; if normalisation of price data submitted is required; the means of any normalisation, and; the inclusion of a data point in the calculation of the final price (exclusion of outliers).

Expert judgement is usually limited to gauging premiums or discounts associated with trades reported on a different incoterm or where the primary chemical composition differs to the specification. A pricing analyst will consult with one or more colleagues before any application of expert judgement if in any doubt or where collective input would improve the quality of a judgement.

Consistency in the application of expert judgement is achieved through a combination of selection, formal and informal training and review, supervisions and control processes as detailed in section 2.5 of the Group Compliance Framework and Methodology Guide.

Verification

Input data points, calculations and the final price for publication are checked and verified by a second pricing analyst at each critical stage (i.e. where there is scope for error or when any application of expert judgment is required to be verified) in the process from data collection to final publication, and this verification is documented including the identity of the verifier.

Final publication

Final publication of CRU's bulk ferroalloys, chrome, molybdenum, nickel, noble alloys & minor metals prices are published in the CRU Bulk Ferroalloys Monitor, Chrome Monitor, Molybdenum Monitor, Nickel Monitor and Noble Alloys & Minor Metals Prices Service respectively, as well as associated price baskets, via FTP data feeds and are available in DataLab.

| | |
|---|-----------|
| CRU Prices..... | 1 |
| Methodology and Definitions Guide..... | 2 |
| Scope..... | 2 |
| Methodology..... | 2 |
| Bulk Ferroalloys..... | 8 |
| Ferromanganese..... | 8 |
| US HC 76% Mn EXW..... | 8 |
| EU HC 76% Mn DDP..... | 8 |
| China HC 75% Mn DAP..... | 8 |
| India HC 76% Mn FOB..... | 8 |
| India HC 70% Mn EXW..... | 9 |
| China HC 75% Mn FOB Theoretical..... | 9 |
| Japan HC 75% CIF (CN orig.) Theoretical [Discontinued]..... | 9 |
| Japan HC 76% CIF..... | 9 |
| China HC 65% Mn DAP..... | 10 |
| US MC 80% Mn EXW..... | 10 |
| EU MC 81% Mn DDP..... | 10 |
| China MC 75% Mn DAP..... | 10 |
| China MC 75% Mn FOB Theoretical..... | 11 |
| US LC 80-85% Mn EXW..... | 11 |
| Ferrosilicon..... | 11 |
| US 50% Si EXW [Discontinued]..... | 11 |
| US 75% Si EXW..... | 12 |
| EU 75% Si DDP..... | 12 |
| US SiC 87-90% Si EXW [Discontinued]..... | 12 |
| China 75% Si FOB..... | 12 |
| China 75% Si DAP..... | 13 |
| China 72% Si FOB..... | 13 |
| China 72% Si DAP..... | 13 |
| Japan 75% Si CIF (CN orig.) Theoretical [Discontinued]..... | 13 |
| Japan 75% Si CIF..... | 14 |
| Silicomanganese..... | 14 |
| US 65% Mn EXW..... | 14 |
| EU 65%Mn DDP..... | 14 |
| China 65% Mn DAP..... | 14 |
| India 65%Mn FOB..... | 15 |
| India 60%Mn FOB..... | 15 |
| India 60% Mn EXW..... | 15 |
| China 65% Mn FOB Theoretical..... | 15 |
| Japan 65% Mn CIF (CN orig.) Theoretical [Discontinued]..... | 16 |
| Japan 65% Mn CIF..... | 16 |
| Japan 65% Mn CIF (IN orig.)..... | 16 |
| China 60% Mn FOB Theoretical..... | 16 |
| China 60% Mn DAP..... | 17 |
| Silicon Metal..... | 17 |
| US 98.5% Si 5-5-3 EXW..... | 17 |
| EU 98.5% Si 5-5-3 DDP..... | 17 |
| China 98.5% Si 5-5-3 FOB..... | 18 |
| China 98.5% Si 5-5-3 DAP..... | 18 |
| Japan 98.5% Si 5-5-3 CIF..... | 18 |
| EU 99% Si 4-4-1 DDP..... | 18 |
| China 99% Si 4-4-1 FOB..... | 19 |
| China 99% Si 4-4-1 DAP..... | 19 |
| US poly-Si 9-11N EXW[Discontinued]..... | 19 |
| Manganese Ore..... | 19 |
| China Lump 36-38% Mn CIF..... | 19 |
| China Lump 44% Mn CIF..... | 20 |
| China Lump 36-38% Mn FOT Tianjin..... | 20 |
| China Lump 44% Mn FOT Tianjin..... | 20 |
| India Lump 36-38% Mn CIF [Discontinued]..... | 20 |
| India Lump 44% Mn CIF [Discontinued]..... | 21 |
| Manganese Metal..... | 21 |
| China EMM Flake 99.7% Mn FOB..... | 21 |
| China EMM Flake 99.7% Mn EXW (dom.)..... | 22 |
| US EMM 99.7% Mn EXW..... | 22 |
| EU EMM 99.7% Mn DDP..... | 22 |
| Manganese Sulfate..... | 22 |
| China Manganese sulfate 32% Mn min, EXW..... | 22 |
| Chrome..... | 24 |
| Ferrochrome..... | 24 |
| US HC 47-55% Cr EXW [Discontinued]..... | 24 |
| EU HC 47-55% Cr DDP Benchmark..... | 24 |

| | |
|---|-----------|
| EU HC 47-55% Cr DDP Free Market [Discontinued] | 24 |
| China HC 49-70% Cr DAP (dom.) | 24 |
| China HC 49-70% Cr CIF (impt.) [Discontinued] | 25 |
| China HC 48-63% Cr CIF (impt.) | 25 |
| EU HC 54-60% Cr DDP | 25 |
| US HC 62-70% Cr EXW | 25 |
| EU HC 62-70% Cr DDP [Discontinued] | 26 |
| EU HC 65-70% Cr DDP | 26 |
| EU HC 60-64.9% Cr DDP | 26 |
| US LC 0.05% C EXW | 26 |
| EU LC 0.05% C DDP | 27 |
| US LC 0.10% C EXW | 27 |
| EU LC 0.10% C DDP | 27 |
| US LC 0.15% C EXW | 27 |
| US FeCr/Sr EXW | 28 |
| Japan HC 60-70% CIF | 28 |
| Japan LC 0.1% CIF | 28 |
| Chrome Ore | 29 |
| China Lump 42% Cr CIF (TR orig.) | 29 |
| China Conc. 48% Cr CIF (TR orig.) | 29 |
| China Ore 38-40% Cr CIF (ZA orig.) | 29 |
| China Conc. 44% Cr CIF (ZA orig.) | 29 |
| China UG2 42% Cr CIF (ZA orig.) | 30 |
| China UG2 42% Cr (ZA orig.) FOT Tianjin | 30 |
| Chrome Metal | 30 |
| US Aluminothermic 99% Cr EXW | 30 |
| EU Aluminothermic 99% Cr DDP | 31 |
| Molybdenum | 32 |
| Ferromolybdenum | 32 |
| US FeMo 65% Mo EXW | 32 |
| EU FeMo 65% Mo DDP | 32 |
| China FeMo 60% Mo DAP | 32 |
| Molybdenum Oxide | 32 |
| US Oxide 60% Mo EXW | 32 |
| EU Oxide 60% Mo EXW | 33 |
| Main Asia Ports Oxide CIF | 33 |
| EU Moly Metal DDP | 33 |
| Noble Alloys & Minor Metals | 34 |
| Ferrotitanium | 34 |
| US FeTi 68-72% Ti EXW | 34 |
| EU FeTi 68-72% Ti DDP | 34 |
| Ferrotungsten | 34 |
| US FeW 72-75% W EXW | 34 |
| EU FeW 72-75% W DDP | 34 |
| Ferrovanadium | 35 |
| US FeV 80% V EXW | 35 |
| EU FeV 80% V DDP | 35 |
| Tantalum | 35 |
| US Ta Ore 30% Ta EXW [Discontinued] | 35 |
| Tungsten | 36 |
| US W Ore 65% WO3 EXW [Discontinued] | 36 |
| US W APT 88.5% WO3 EXW [Discontinued] | 36 |
| China FeW 72-75% W FOB | 36 |
| China tungsten concentrate 65% WO3 – domestic DAP | 36 |
| China APT 88.5% DAP | 37 |
| China APT 88.5% WO3 FOB | 37 |
| Vanadium | 37 |
| China V2O5 98% V FOB | 37 |
| China V2O5 98% V DAP (dom.) | 37 |
| Minor Metals | 38 |
| US Antimony 99.65% Sb EXW | 38 |
| EU Antimony 99.65% Sb EXW | 38 |
| US Bismuth 99.99% Bi EXW | 38 |
| EU Bismuth 99.99% Bi EXW | 38 |
| US Cadmium 99.95% Cd EXW | 39 |
| EU Cadmium 99.95% Cd EXW | 39 |
| US Indium 99.99% In EXW | 39 |
| EU Indium 99.99% In EXW | 39 |
| US Selenium 99.5% Se EXW | 40 |
| EU Selenium 99.5% Se EXW | 40 |
| Cobalt | 40 |
| EU 99.8% Co DDP | 40 |

| | |
|--------------------------|----|
| US 99.8% Co EXW..... | 40 |
| China 99.8% Co DAP | 41 |

Bulk Ferroalloys

Ferromanganese

US HC 76% Mn EXW

| | |
|-------------------------------|---|
| DataLab Name: | Ferromanganese, High Carbon, 76% Mn, Spot price; USA, ex-warehouse |
| Grade: | 76% Mn, 7% C, 1.5% Si, Max 0.25% P, 0.3% S |
| Price basis: | US ex-warehouse, per long ton of material |
| Credit/Payment terms: | Cash/Net 30-60 standard |
| Packaging: | Bulk |
| Loading Location: | US warehouse, typically Pittsburgh or Chicago, producer plant |
| Type: | Spot |
| Currency: | US dollar in cents |
| Weight Unit: | Long ton |
| Size: | Multiple truckloads |
| Timing: | No more than 16 weeks forward |
| Main Consumer Markets: | US inland terminals/locations |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | Duty paid |

EU HC 76% Mn DDP

| | |
|-------------------------------|--|
| DataLab Name: | Ferromanganese, High Carbon, 76% Mn, Spot price; Europe, DDP |
| Grade: | 76% Mn, 7% C, 1.5% Si, Max 0.25% P, 0.3% S |
| Price basis: | Delivered, duty paid, per Tonne of material |
| Credit/Payment terms: | Cash/Net 30-60 standard |
| Packaging: | Bulk |
| Loading Location: | Rotterdam warehouse or producing plant, additional locations |
| Type: | Spot |
| Currency: | Euro |
| Weight Unit: | Tonne |
| Size: | Multiple truckloads |
| Timing: | No more than 12 weeks forward |
| Main Consumer Markets: | European inland terminals/locations |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | Duty paid |

China HC 75% Mn DAP

| | |
|-------------------------------|--|
| DataLab Name: | Ferromanganese, High Carbon, 75% Mn, Spot price; China, DAP |
| Grade: | 75% Mn |
| Price basis: | Per mt, delivered steel mill, mainly Hebei |
| Credit/Payment terms: | n/a |
| Loading Location: | Producing plant |
| Type: | Spot |
| Currency: | RMB |
| Weight Unit: | Tonne |
| Size: | 100 t + |
| Timing: | n/a |
| Main Consumer Markets: | Northern China |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | VAT included, any other duties excluded |
| Frequency: | Bi-weekly, every Tuesday and Thursday |

India HC 76% Mn FOB

| | |
|------------------------------|--|
| DataLab Name: | Ferromanganese, High Carbon, 76% Mn, Spot price; India, FOB |
| Grade: | 76% Mn, 7% C, 1.5% Si, Max 0.25% P, 0.3% S |
| Price basis: | FOB India, per Tonne of material |
| Credit/Payment terms: | Cash/Net 30-60 standard |
| Packaging: | Bulk |
| Loading Location: | Producing plant, additional locations |
| Type: | Spot |

| | |
|------------------------|--|
| Currency: | Dollar |
| Weight Unit: | Tonne |
| Size: | Multiple truckloads |
| Timing: | No more than 12 weeks forward |
| Main Consumer Markets: | Europe, Middle East, South East Asia |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | Duty paid |

India HC 70% Mn EXW

| | |
|------------------------|--|
| DataLab Name: | Ferromanganese, High carbon, 70% Mn, Spot price; India, ex-warehouse |
| Grade: | 70% Mn, 6% C, 1.2% Si, Max 0.3% P, 0.03% S |
| Price basis: | Ex-warehouse/Ex-plant, per Tonne of material |
| Credit/Payment terms: | Cash/Net 30-60 standard |
| Packaging: | Bulk Loading |
| Location: | Producing plant or warehouse |
| Type: | Spot |
| Currency: | Indian Rupees (INR) |
| Weight Unit: | Tonne |
| Size: | Multiple truckloads |
| Timing: | No more than 4 weeks forward |
| Main Consumer Markets: | Indian inland terminals/locations |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | Duty paid |

China HC 75% Mn FOB Theoretical

| | |
|------------------------|---|
| DataLab Name: | Ferromanganese, High Carbon, 75% Mn, Spot price; China, FOB |
| Grade: | Mn 75%; C 8% max |
| Price basis: | Per mt, FOB port, mainly Tianjin and Fangcheng |
| Credit/Payment terms: | Letter of credit or Wire Transfer |
| Loading Location: | Chinese ports |
| Type: | Spot |
| Currency: | US dollar |
| Weight Unit: | Tonne |
| Size: | Bulk, typically 25 mt container |
| Timing: | 4-8 weeks |
| Main Consumer Markets: | No markets currently exist |
| Pricing: | Calculated |
| Duties/Tariffs: | Export duty paid |
| Frequency: | Bi-weekly, every Tuesday and Thursday |

Japan HC 75% CIF (CN orig.) Theoretical [Discontinued]

| | |
|------------------------|---|
| DataLab name: | Ferromanganese, High Carbon, 75% Mn, Spot price; Japan, China Origin, CIF |
| Grade: | 75% Mn |
| Price basis: | CIF Japan |
| Credit/Payment terms: | n/a |
| Loading Location: | Chinese port |
| Type: | Spot |
| Currency: | USD |
| Weight Unit: | Tonne |
| Size: | 100+ t |
| Timing: | n/a |
| Main Consumer Markets: | Japan |
| Pricing: | Calculated |
| Duties/Tariffs: | Export duty paid |

Japan HC 76% CIF

| | |
|-----------------------|---|
| DataLab Name: | Ferromanganese, High Carbon, 76% Mn, Spot price; Japan, CIF |
| Grade: | 76% Mn |
| Price basis: | CIF Japan |
| Credit/Payment terms: | Line of credit/Wire transfer |
| Loading Location: | Producer main port |
| Type: | Spot |

| | |
|------------------------|--|
| Currency: | USD |
| Weight Unit: | Tonne |
| Size: | Bulk, typically 25 mt container |
| Timing: | No more than 12 weeks forward |
| Main Consumer Markets: | Japan |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | Export duty paid |

China HC 65% Mn DAP

| | |
|------------------------|--|
| DataLab Name: | Ferromanganese, High Carbon, 65% Mn, Spot price; China, DAP |
| Grade: | 65% Mn |
| Price basis: | Per mt, delivered steel mill, mainly Hebei |
| Credit/Payment terms: | n/a |
| Loading Location: | Producing plant |
| Type: | Spot |
| Currency: | RMB |
| Weight Unit: | Tonne |
| Size: | 100+ t |
| Timing: | n/a |
| Main Consumer Markets: | Northern China |
| Pricing: | Business reported by sellers to buyers – no inter-trade activity |
| Duties/Tariffs: | VAT included, any other duties excluded |
| Frequency: | Bi-weekly, every Tuesday and Thursday |

US MC 80% Mn EXW

| | |
|------------------------|--|
| DataLab Name: | Ferromanganese, Medium Carbon, 80% Mn, Spot price; USA, ex-warehouse |
| Grade: | 80% Mn, 1.5% C, Max 0.3% P, 0.2% S, 1% Si |
| Price basis: | US ex-warehouse, per pound Mn |
| Credit/Payment terms: | Cash/Net 30-60 standard |
| Packaging: | Bulk |
| Loading Location: | US warehouse, typically Pittsburgh or Chicago, producer plant |
| Type: | Spot |
| Currency: | US dollar in cents |
| Weight Unit: | Pounds |
| Size: | Multiple truckloads |
| Timing: | No more than 16 weeks forward |
| Main Consumer Markets: | US inland terminals/locations |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | Duty paid |

EU MC 81% Mn DDP

| | |
|------------------------|--|
| DataLab Name: | Ferromanganese, Medium Carbon, 81% Mn, Spot price; Europe, DDP |
| Grade: | 81% Mn, 1.5% C, Max 0.3% P, 0.2% S, 1% Si |
| Price basis: | Delivered, duty paid, per pound of material |
| Credit/Payment terms: | Cash/Net 30-60 standard |
| Packaging: | Bulk |
| Loading Location: | Rotterdam warehouse or producing plant, additional locations |
| Type: | Spot |
| Currency: | Euros |
| Weight Unit: | Tonne |
| Size: | Multiple truckloads |
| Timing: | No more than 12 weeks forward |
| Main Consumer Markets: | European inland terminals/locations |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | Duty paid |

China MC 75% Mn DAP

| | |
|-----------------------|---|
| DataLab Name: | Ferromanganese, Medium Carbon, 75% Mn, Spot price; China, DAP |
| Grade: | 75% Mn, 2% max C |
| Price basis: | Per mt, delivered steel mill, mainly Hebei |
| Credit/Payment terms: | n/a |
| Loading Location: | Producer plant |

| | |
|------------------------|---|
| Type: | Spot |
| Currency: | RMB |
| Weight Unit: | Tonne |
| Size: | 100t + |
| Timing: | n/a |
| Main Consumer Markets: | Northern China |
| Pricing: | Business reported by sellers to buyers – no inter-trade |
| Duties/Tariffs: | VAT included, any other duties excluded |
| Frequency: | Bi-weekly, every Tuesday and Thursday |

China MC 75% Mn FOB Theoretical

| | |
|------------------------|---|
| DataLab Name: | Ferromanganese, Medium Carbon, 75% Mn, Spot price; China, FOB |
| Grade: | Mn 75%, 2% max C |
| Price basis: | FOB China ports |
| Credit/Payment terms: | Line of credit/Wire Transfer |
| Loading Location: | Foreign destination ports |
| Type: | Spot |
| Currency: | US dollar |
| Weight Unit: | Tonne |
| Size: | Bulk, typically 25 mt container |
| Timing: | 4-8 weeks |
| Main Consumer Markets: | No markets currently exist |
| Pricing: | Calculated |
| Duties/Tariffs: | Export duty paid |
| Frequency: | Bi-weekly, every Tuesday and Thursday |

US LC 80-85% Mn EXW

| | |
|------------------------|--|
| DataLab Name: | Ferromanganese, Low Carbon, 80-85% Mn, Spot price; USA, ex-warehouse |
| Grade: | 80-85% Mn, Max 0.5% C, 2% Si, 0.3% P, 0.3% S |
| Price basis: | US ex-warehouse, per pound Mn |
| Credit/Payment terms: | Cash/Net 30-60 standard |
| Packaging: | Bulk |
| Loading Location: | US warehouse, typically Pittsburgh or Chicago, producer plant |
| Type: | Spot |
| Currency: | US dollar in cents |
| Weight Unit: | Pounds |
| Size: | Multiple truckloads |
| Timing: | No more than 16 weeks forward |
| Main Consumer Markets: | US inland terminals/locations |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | Duty paid |

Ferrosilicon

US 50% Si EXW [Discontinued]

| | |
|------------------------|--|
| DataLab Name: | Ferrosilicon, 50% Si, Spot price; USA, ex-warehouse |
| Grade: | 50% Si |
| Price basis: | US ex-warehouse or producing plant, per pound Si |
| Credit/Payment terms: | Cash/Net 30-60 standard |
| Packaging: | Bulk |
| Loading Location: | US warehouse, typically Pittsburgh or Chicago, producer plant |
| Type: | Spot |
| Currency: | US dollar in cents |
| Weight Unit: | Pounds |
| Size: | Truckload or larger |
| Timing: | No more than 12 weeks forward |
| Main Consumer Markets: | US inland terminals/locations |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | Duty paid |

US 75% Si EXW

| | |
|------------------------|--|
| DataLab Name: | Ferrosilicon, 75% Si, Spot price; USA, ex-warehouse |
| Grade: | 75% Si, Max 0.1% V, Max 1.5% Al (Standard 2" X 1/2") |
| Price basis: | US ex-warehouse or producing plant, per pound Si |
| Credit/Payment terms: | Cash/Net 30-60 standard |
| Packaging: | Bulk |
| Loading Location: | US warehouse, typically Pittsburgh or Chicago, producer plant |
| Type: | Spot |
| Currency: | US dollar in cents |
| Weight Unit: | Pounds |
| Size: | Multiple truckloads |
| Timing: | No more than 16 weeks forward |
| Main Consumer Markets: | US inland terminals/locations |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | Duty paid |

EU 75% Si DDP

| | |
|------------------------|--|
| DataLab Name: | Ferrosilicon, 75% Si, Spot price; Europe, DDP |
| Grade: | 75% Si, Max 1.5% Al, 0.10% C, 0.04% P, 0.01% S (Standard 10-50mm) |
| Price basis: | DDP, per mt of material (not Si) |
| Credit/Payment terms: | Cash/Net 30-60 standard |
| Packaging: | Bulk |
| Loading Location: | Rotterdam warehouse or producing plant, additional locations |
| Type: | Spot |
| Currency: | Euro |
| Weight Unit: | Tonne |
| Size: | Multiple truckloads |
| Timing: | No more than 12 weeks forward |
| Main Consumer Markets: | European inland terminals/locations |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | Duty paid |

US SiC 87-90% Si EXW *[Discontinued]*

| | |
|------------------------|---|
| DataLab Name: | Ferrosilicon, Silicon carbide, 87-90% Si, Spot price; USA, ex-warehouse |
| Grade: | 87-90% Si, 2-5% C |
| Price basis: | US ex-warehouse, per pound gross material |
| Credit/Payment terms: | Cash/Net 30-60 standard |
| Packaging: | 50 lbs bags |
| Loading Location: | US warehouse, typically Pittsburgh or Chicago, plant |
| Type: | Spot |
| Currency: | US dollar |
| Weight Unit: | Short tons |
| Size: | Multiple truckloads |
| Timing: | No more than 12 weeks forward |
| Main Consumer Markets: | US inland terminals/locations |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | Duty paid |

China 75% Si FOB

| | |
|------------------------|--|
| DataLab Name: | Ferrosilicon, 75% Si, Spot price; China, FOB |
| Grade: | 74-80% Si |
| Price basis: | FOB Tianjin port, China |
| Credit/Payment terms: | Line of credit/Wire Transfer |
| Loading Location: | Chinese ports - foreign destination ports |
| Type: | Spot |
| Currency: | US dollar |
| Weight Unit: | Tonne |
| Size: | Typically 25 mt container |
| Timing: | Typically 4-8 weeks |
| Main Consumer Markets: | Japan, South Korea, the US, India and Southeast Asia |
| Pricing: | Business reported by sellers to buyers, including producers to traders |

Duties/Tariffs: Export duty paid
 Frequency: Bi-weekly, every Tuesday and Thursday

China 75% Si DAP

DataLab Name: Ferrosilicon, 75% Si, Spot price; China, DAP
Grade: 75% Si
Price basis: Per mt, delivered steel mill, mainly Hebei
Credit/Payment terms: n/a
Loading Location: Producing plant
Type: Spot
Currency: RMB
Weight Unit: Tonne
Size: 100t +
Timing: n/a
Main Consumer Markets: Northern China
Pricing: Business reported by sellers to buyers – no inter-trade
Duties/Tariffs: VAT included, any other duties excluded
Frequency: Bi-weekly, every Tuesday and Thursday

China 72% Si FOB

DataLab Name: Ferrosilicon, 72% Si, Spot price; China, FOB
Grade: 72-74% Si
Price basis: FOB major ports, China
Credit/Payment terms: Line of credit/Wire Transfer
Loading Location: Chinese ports - foreign destination ports
Type: Spot
Currency: US dollar
Weight Unit: Tonne
Size: 100t +
Timing: 4-8 weeks
Main Consumer Markets: Japan, South Korea, the US, India and Southeast Asia
Pricing: Business reported by sellers to buyers, including producers to traders
Duties/Tariffs: Export duty paid
Frequency: Bi-weekly, every Tuesday and Thursday

China 72% Si DAP

DataLab Name: Ferrosilicon, 72% Si, Spot price; China, DAP
Grade: 72-74% Si
Price basis: Per mt, delivered steel mill, mainly Hebei
Credit/Payment terms: n/a
Loading Location: Producing plant
Type: Spot
Currency: RMB
Weight Unit: Tonne
Size: 100t +
Timing: n/a
Main Consumer Markets: Northern China
Pricing: Business reported by sellers to buyers – no inter-trade
Duties/Tariffs: VAT included, any other duties excluded
Frequency: Bi-weekly, every Tuesday and Thursday

Japan 75% Si CIF (CN orig.) Theoretical *[Discontinued]*

DataLab Name: Ferrosilicon, 75% Si, Spot price; Japan, China origin. CIF
Grade: Si 75%
Price basis: CIF Japan
Credit/Payment terms: Line of credit/Wire Transfer
Loading Location: Chinese port
Type: Spot
Currency: US dollar
Weight Unit: Tonne
Size: Bulk, typically 25 mt container
Timing: Typically 4-8 weeks

| | |
|------------------------|--|
| Main Consumer Markets: | Japan |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | Export duty paid |

Japan 75% Si CIF

| | |
|------------------------|--|
| DataLab Name: | Ferrosilicon, 75% Si, Spot price; Japan, CIF |
| Grade: | Si 75% |
| Price basis: | CIF Japan |
| Credit/Payment terms: | Line of credit/Wire transfer |
| Loading Location: | Producer main port |
| Type: | Spot |
| Currency: | US dollar |
| Weight Unit: | Tonne |
| Size: | Typically 25 mt container |
| Timing: | No more than 12 weeks forward |
| Main Consumer Markets: | Japan |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | Export duty paid |

Silicomanganese

US 65% Mn EXW

| | |
|------------------------|--|
| DataLab Name: | Silicomanganese, 65% Mn, Spot price; USA, ex-warehouse |
| Grade: | 65-68% Mn, 16-18.5% Si |
| Price basis: | US ex-warehouse or producing plant, per pound |
| Credit/Payment terms: | Cash/Net 30-60 standard |
| Packaging: | Bulk |
| Loading Location: | US warehouse, typically Pittsburgh or Chicago |
| Type: | Spot |
| Currency: | US dollar in cents |
| Weight Unit: | Pounds |
| Size: | Multiple truckloads |
| Timing: | No more than 16 weeks forward |
| Main Consumer Markets: | US inland terminals/locations |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | Duty paid |

EU 65%Mn DDP

| | |
|------------------------|--|
| DataLab Name: | Silicomanganese, 65% Mn, Spot price; Europe, DDP |
| Grade: | 65-68% Mn, 16% Si, 2% C, 0.3% P, 0.03% S |
| Price basis: | Delivered, duty paid, per Tonne |
| Credit/Payment terms: | Cash/Net 30-60 standard |
| Packaging: | Bulk |
| Loading Location: | Rotterdam or producing plant |
| Type: | Spot |
| Currency: | Euro |
| Weight Unit: | Tonne |
| Size: | Multiple truckloads |
| Timing: | No more than 12 weeks forward |
| Main Consumer Markets: | European inland terminals/locations |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | Duty paid |

China 65% Mn DAP

| | |
|-----------------------|---|
| DataLab Name: | Silicomanganese, 65% Mn, Spot price; China, DAP |
| Grade: | 65% Mn, 16% Si |
| Price basis: | Per mt, delivered steel mill, mainly Hebei |
| Credit/Payment terms: | n/a |
| Loading Location: | Producing plant |
| Type: | Spot |

| | |
|------------------------|--|
| Currency: | RMB |
| Weight Unit: | Tonne |
| Size: | 100t + |
| Timing: | n/a |
| Main Consumer Markets: | Northern China |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | VAT included, any other duties excluded |
| Frequency: | Bi-weekly, every Tuesday and Thursday |

India 65%Mn FOB

| | |
|------------------------|--|
| DataLab Name: | Silicomanganese, 65% Mn, Spot price; India, FOB |
| Grade: | 65% Mn, 16% Si |
| Price basis: | FOB India, per Tonne of material |
| Credit/Payment terms: | Cash/Net 30-60 standard |
| Packaging: | Bulk |
| Loading Location: | Producing plant |
| Type: | Spot |
| Currency: | Dollar |
| Weight Unit: | Tonne |
| Size: | Multiple truckloads |
| Timing: | No more than 12 weeks forward |
| Main Consumer Markets: | Europe, Middle East, South East Asia |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | Duty paid |

India 60%Mn FOB

| | |
|------------------------|--|
| DataLab Name: | Silicomanganese, 60% Mn, Spot price; India, FOB |
| Grade: | 60% Mn, 14% Si, 2.5% C |
| Price basis: | FOB India, per Tonne of material |
| Credit/Payment terms: | Cash/Net 30-60 standard |
| Packaging: | Bulk |
| Loading Location: | Producing plant |
| Type: | Spot |
| Currency: | Dollar |
| Weight Unit: | Tonne |
| Size: | Multiple truckloads |
| Timing: | No more than 12 weeks forward |
| Main Consumer Markets: | Europe, Middle East, South East Asia |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | Duty paid |

India 60% Mn EXW

| | |
|------------------------|--|
| DataLab Name: | Silicomanganese, 60% Mn, Spot price; India, ex-warehouse |
| Grade: | 60% Mn, 14% Si, 2.5% C max, 0.3% P, 0.03% S |
| Price basis: | EXW (Ex-warehouse/Ex-plant), per Tonne of material |
| Credit/Payment terms: | Cash/Net 30-60 standard |
| Packaging: | Bulk Loading |
| Location: | Producing plant or warehouse |
| Type: | Spot |
| Currency: | Indian Rupees (INR) |
| Weight Unit: | Tonne |
| Size: | Multiple truckloads |
| Timing: | No more than 4 weeks forward |
| Main Consumer Markets: | Indian inland terminals/locations |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | Duty paid |

China 65% Mn FOB Theoretical

| | |
|----------------------|--|
| DataLab Name: | Silicomanganese, 65% Mn, Spot price; China, FOB |
| Grade: | Mn 65%; Si 17% |
| Price basis: | FOB China ports (mostly Tianjin and Fangcheng) |

| | |
|------------------------|---|
| Credit/Payment terms: | Line of credit/Wire Transfer |
| Loading Location: | Chinese ports - foreign destination ports |
| Type: | Spot |
| Currency: | US dollar |
| Weight Unit: | Tonne |
| Size: | Bulk, typically 25 mt container |
| Timing: | 4-8 weeks |
| Main Consumer Markets: | Japan, Africa and Asia |
| Pricing: | Calculated |
| Duties/Tariffs: | Export duty paid |
| Frequency: | Bi-weekly, every Tuesday and Thursday |

Japan 65% Mn CIF (CN orig.) Theoretical *[Discontinued]*

| | |
|------------------------|---|
| DataLab Name: | Silicomanganese, 65% Mn, Spot price; Japan, China origin, CIF |
| Grade: | Mn 65%; Si 17% |
| Price basis: | CIF Japan |
| Credit/Payment terms: | n/a |
| Loading Location: | Chinese ports |
| Type: | Spot |
| Currency: | US dollar |
| Weight Unit: | Tonne |
| Size: | Bulk, typically 25 mt container |
| Timing: | n/a |
| Main Consumer Markets: | Japan |
| Pricing: | Calculated |
| Duties/Tariffs: | Export duty paid |

Japan 65% Mn CIF

| | |
|------------------------|--|
| DataLab Name: | Silicomanganese, 65% Mn, Spot price; Japan, CIF |
| Grade: | Mn 65%; Si 17% |
| Price basis: | CIF Japan |
| Credit/Payment terms: | Line of credit/Wire transfer |
| Loading Location: | Producer main port |
| Type: | Spot |
| Currency: | US dollar |
| Weight Unit: | Tonne |
| Size: | Bulk, typically 25 mt container |
| Timing: | No more than 12 weeks forward |
| Main Consumer Markets: | Japan |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | Export duty paid |

Japan 65% Mn CIF (IN orig.)

| | |
|------------------------|--|
| DataLab Name: | Silicomanganese, 65% Mn, Spot price; Japan, India origin, CIF |
| Grade: | 65% Mn, 16% Si |
| Price basis: | CIF Japan |
| Credit/Payment terms: | Line of credit/Wire transfer |
| Loading Location: | Producer main port |
| Type: | Spot |
| Currency: | US dollar |
| Weight Unit: | Tonne |
| Size: | Bulk, typically 25 mt container |
| Timing: | No more than 12 weeks forward |
| Main Consumer Markets: | Japan |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | Duties paid |

China 60% Mn FOB Theoretical

| | |
|---------------|---|
| DataLab Name: | Silicomanganese, 60% Mn, Spot price; China, FOB |
| Grade: | Mn 60%; Si 14% |
| Price basis: | FOB China ports (mostly Tianjin and Fangcheng) |

| | |
|------------------------|--|
| Credit/Payment terms: | Line of credit/Wire Transfer |
| Loading Location: | Chinese ports - foreign destination ports |
| Type: | Spot |
| Currency: | US dollar |
| Weight Unit: | Tonne |
| Size: | Bulk, typically 25 mt container |
| Timing: | 4-8 weeks |
| Main Consumer Markets: | Japan, Africa and Asia |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | Export duty paid |
| Frequency: | Bi-weekly, every Tuesday and Thursday |

China 60% Mn DAP

| | |
|------------------------|--|
| DataLab Name: | Silicomanganese, 60% Mn, Spot price; China, DAP |
| Grade: | 60% Mn, 14% Si |
| Price basis: | Per mt, delivered steel mill, mainly Hebei |
| Credit/Payment terms: | n/a |
| Loading Location: | Producing plant |
| Type: | Spot |
| Currency: | RMB |
| Weight Unit: | Tonne |
| Size: | 100t + |
| Timing: | n/a |
| Main Consumer Markets: | Northern China |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | VAT included, any other duties excluded |
| Frequency: | Bi-weekly, every Tuesday and Thursday |

Silicon Metal

US 98.5% Si 5-5-3 EXW

| | |
|------------------------|--|
| DataLab Name: | Silicon Metal, 98.5% Si 5-5-3 Mn, Spot price; USA, ex-warehouse |
| Grade: | 98.5% Si; Max 0.5% Fe; 0.5% Al; 0.3% Ca |
| Price basis: | US ex-warehouse, per pound Si |
| Credit/Payment terms: | Cash/Net 30-60 standard |
| Packaging: | Bulk |
| Loading Location: | US warehouse, typically Pittsburgh or Chicago or producing plant |
| Type: | Spot |
| Currency: | US dollar in cents |
| Weight Unit: | Pounds |
| Size: | 1-5 truckloads |
| Timing: | No more than 16 weeks forward |
| Main Consumer Markets: | US inland terminals/locations |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | Duty paid |

EU 98.5% Si 5-5-3 DDP

| | |
|------------------------|--|
| DataLab Name: | Silicon Metal, 98.5% Si 5-5-3, Spot price; Europe, DDP |
| Grade: | 98.5% Si, Max 0.5% Fe, 0.5% Al, 0.3% Ca |
| Price basis: | Delivered, duty paid, per Tonne |
| Credit/Payment terms: | Cash/Net 30-60 standard |
| Packaging: | Bulk |
| Loading Location: | Rotterdam or producing plant |
| Type: | Spot |
| Currency: | Euros |
| Weight Unit: | Tonne |
| Size: | Multiple truckloads |
| Timing: | No more than 12 weeks forward |
| Main Consumer Markets: | European inland terminals/locations |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | Not applicable |

China 98.5% Si 5-5-3 FOB

DataLab Name:

| | |
|------------------------|--|
| Grade: | Silicon Metal, 98.5% Si 5-5-3, Spot price; China, FOB |
| Price basis: | Si 98.5% min; Max 0.5% Fe, 0.5% Al, 0.3% Ca |
| Credit/Payment terms: | FOB Guangzhou Huangpu port, China |
| Loading Location: | Line of credit/Wire Transfer |
| Type: | Chinese ports - foreign destination ports |
| Currency: | Spot |
| Weight Unit: | US dollar |
| Size: | Tonne |
| Timing: | Bulk, typically 25 mt container |
| Main Consumer Markets: | 4-8 week delivery |
| Pricing: | Japan, South Korea, Southeast Asia, India and Europe |
| Duties/Tariffs: | Business reported by sellers to buyers, including producers to traders |
| Frequency: | No export duty |
| | Bi-weekly, every Tuesday and Thursday |

China 98.5% Si 5-5-3 DAP

DataLab Name:

| | |
|------------------------|--|
| Grade: | Silicon Metal, 98.5% Si 5-5-3, Spot price; China, DAP |
| Price basis: | Si 98.5% min; Max 0.5% Fe, 0.5% Al, 0.3% Ca |
| Credit/Payment terms: | Delivered consumer |
| Loading Location: | Cash/Bank acceptance bill |
| Type: | Producing plant |
| Currency: | Spot |
| Weight Unit: | RMB |
| Size: | Tonne |
| Timing: | Multiple truckloads |
| Main Consumer Markets: | No more than 12 weeks forward |
| Pricing: | China inland |
| Duties/Tariffs: | Business reported by sellers to buyers, including producers to traders |
| Frequency: | VAT included, any other duties excluded |
| | Bi-weekly, every Tuesday and Thursday |

Japan 98.5% Si 5-5-3 CIF

DataLab Name:

| | |
|------------------------|--|
| Grade: | Silicon Metal, 98.5% Si 5-5-3, Spot price; Japan, DAP |
| Price basis: | Si 98.5% min; Max 0.5% Fe, 0.5% Al, 0.3% Ca |
| Credit/Payment terms: | CIF Japan |
| Loading Location: | Line of credit/Wire transfer |
| Type: | Country of origin, mostly China |
| Currency: | Spot |
| Weight Unit: | USD |
| Size: | Tonne |
| Timing: | Multiple containers |
| Main Consumer Markets: | No more than 12 weeks forward |
| Pricing: | Japanese terminals/locations |
| Duties/Tariffs: | Business reported by sellers to buyers, including producers to traders |
| | Duties paid |

EU 99% Si 4-4-1 DDP

DataLab Name:

| | |
|------------------------|--|
| Grade: | Silicon Metal, 99% Si 4-4-1, Spot price; Europe, DDP |
| Price basis: | 99% Si, Max 0.4% Fe, 0.4% Al, 0.1% Ca |
| Credit/Payment terms: | Delivered, duty paid, per Tonne |
| Packaging: | Cash/Net 30-60 standard |
| Loading Location: | Bulk |
| Type: | Rotterdam, producing plant |
| Currency: | Spot |
| Weight Unit: | Euro |
| Size: | Tonne |
| Timing: | Multiple truckloads |
| Main Consumer Markets: | No more than 12 weeks forward |
| | European inland terminals/locations |

Pricing: Business reported by sellers to buyers, including producers to traders
 Duties/Tariffs: Not applicable

China 99% Si 4-4-1 FOB

DataLab Name: Silicon Metal, 99% Si 4-4-1, Spot price; China, FOB
Grade: Si 99% min, Max 0.4% Fe, 0.4% Al, 0.1% Ca
Price basis: FOB Guangzhou Huangpu port, China
Credit/Payment terms: Line of credit/Wire Transfer
Loading Location: Chinese ports - foreign destination ports
Type: Spot
Currency: US dollar
Weight Unit: Tonne
Size: 25 mt per container
Timing: 4-8 week delivery
Main Consumer Markets: Japan, South Korea, Southeast Asia, India and Europe
Pricing: Business reported by sellers to buyers, including producers to traders
Duties/Tariffs: No export duty
Frequency: Bi-weekly, every Tuesday and Thursday

China 99% Si 4-4-1 DAP

DataLab Name: Silicon Metal, 99% Si 4-4-1, Spot price; China, DAP
Grade: Si 99% min, Max 0.4% Fe, 0.4% Al, 0.1% Ca
Price basis: Delivered consumer
Credit/Payment terms: Cash/Bank acceptance bill
Loading Location: Producing plant
Type: Spot
Currency: RMB
Weight Unit: Tonne
Size: Multiple truckloads
Timing: No more than 12 weeks forward
Main Consumer Markets: China inland terminals/locations
Pricing: Business reported by sellers to buyers, including producers to traders
Duties/Tariffs: VAT included, any other duties excluded
Frequency: Bi-weekly, every Tuesday and Thursday

US poly-Si 9-11N EXW [Discontinued]

DataLab Name: Silicon Metal, Polysilicon Trans Si 9-11N, Spot price; USA, ex-warehouse
Grade: 9-11N Si
Price basis: US ex-warehouse, per kilogram
Credit/Payment terms: Cash/Net 30-60 standard
Packaging: Big bags
Loading Location: US warehouse, producer plants
Type: Spot
Currency: US dollar
Weight Unit: Kilogram
Size: Tonne s chunks
Timing: No more than 12 weeks forward
Main Consumer Markets: US inland terminals, international procurements
Pricing: Business reported by sellers to buyers, including producers to traders
Duties/Tariffs: Not applicable in US

Manganese Ore

China Lump 36-38% Mn CIF

DataLab Name: Manganese Ore, Lump, 36-38% Mn, Spot price; China, CIF
Grade: 36-38% Mn
Price basis: CIF main Chinese port, per dmtu
Credit/Payment terms: Cash/Net 30-60 standard
Packaging: Bulk, container
Loading Location: Producer main port
Type: Spot

| | |
|------------------------|--|
| Currency: | US dollar |
| Weight Unit: | Dry Tonne |
| Size: | Multiple containers or larger |
| Timing: | No more than 12 weeks forward |
| Main Consumer Markets: | China inland terminals/locations |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | No |
| Frequency: | Bi-weekly, every Tuesday and Thursday |

China Lump 44% Mn CIF

| | |
|------------------------|--|
| DataLab Name: | Manganese Ore, Lump, 44% Mn, Spot price; China, CIF |
| Grade: | 44% Mn (Range 40-46%) |
| Price basis: | Per dmtu, CIF Chinese main port |
| Credit/Payment terms: | Cash/Net 30-60 standard |
| Packaging: | Bulk, container |
| Loading Location: | Producing nation's main port |
| Type: | Spot |
| Currency: | US dollar |
| Weight Unit: | Dry Tonne |
| Size: | Multiple containers or larger |
| Timing: | No more than 12 weeks forward |
| Main Consumer Markets: | China inland terminals/locations |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | No |
| Frequency: | Bi-weekly, every Tuesday and Thursday |

China Lump 36-38% Mn FOT Tianjin

| | |
|------------------------|---|
| DataLab Name: | Manganese Ore, Lump, 36-38% Mn, Spot price; China, Tianjin, FOT |
| Grade: | 36-38% |
| Price basis: | FOT Tianjin port, per dmtu |
| Credit/Payment terms: | Cash |
| Packaging: | Bulk, container |
| Loading Location: | producing plant |
| Type: | Spot |
| Currency: | RMB |
| Weight Unit: | Dry tonne |
| Size: | Multiple containers or larger |
| Timing: | n/a |
| Main Consumer Markets: | Smelters in China and traders |
| Pricing: | Business reported by sellers to buyers |
| Duties/Tariffs: | Duty paid |
| Frequency: | Bi-weekly, every Tuesday and Thursday |

China Lump 44% Mn FOT Tianjin

| | |
|------------------------|--|
| DataLab Name: | Manganese Ore, Lump, 44% Mn, Spot price; China, Tianjin, FOT |
| Grade: | 44% Mn (Range 40-46%) |
| Price basis: | FOT Tianjin port, per dmtu |
| Credit/Payment terms: | Cash |
| Packaging: | Bulk, container |
| Loading Location: | Producing plant |
| Type: | Spot |
| Currency: | RMB |
| Weight Unit: | Dry tonne |
| Size: | Multiple containers or larger |
| Timing: | n/a |
| Main Consumer Markets: | Smelters in China and traders |
| Pricing: | Business reported by sellers to buyers |
| Duties/Tariffs: | Duty paid |
| Frequency: | Bi-weekly, every Tuesday and Thursday |

India Lump 36-38% Mn CIF [Discontinued]

| | |
|---------------|--|
| DataLab Name: | Manganese Ore, Lump, 36-38% Mn, Spot price; India, CIF |
|---------------|--|

| | |
|------------------------|--|
| Grade: | 36-38% Mn |
| Price basis: | CIF main India port, per dmtu |
| Credit/Payment terms: | Cash/Net 30-60 standard |
| Packaging: | Bulk, container |
| Loading Location: | Producing nation's main port |
| Type: | Spot |
| Currency: | US dollar |
| Weight Unit: | Dry Tonne |
| Size: | Multiple containers or larger |
| Timing: | No more than 12 weeks forward |
| Main Consumer Markets: | India inland terminals/locations |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | No |

India Lump 44% Mn CIF *[Discontinued]*

DataLab Name: Manganese Ore, Lump, 44% Mn, Spot price; India, CIF

| | |
|------------------------|--|
| Grade: | 44% Mn (Range 42-45%) |
| Price basis: | Per dmtu unit, CIF India main ports |
| Credit/Payment terms: | Cash/Net 30-60 standard |
| Packaging: | Bulk, container |
| Loading Location: | Producing nation's main port |
| Type: | Spot |
| Currency: | US dollar |
| Weight Unit: | Dry Tonne |
| Size: | Multiple containers or larger |
| Timing: | No more than 12 weeks forward |
| Main Consumer Markets: | India inland terminals/locations |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | No |

Manganese Metal

China EMM Flake 99.7% Mn FOB

DataLab Name: Manganese Metal, Electrolytic Flake 99.7% Mn, Spot price; China, FOB

| | |
|------------------------|--|
| Grade: | Mn 99.7% min (electrolytic) |
| Price basis: | FOB Guangzhou Huangpu port, China |
| Credit/Payment terms: | Line of credit/Wire Transfer |
| Loading Location: | Chinese ports - foreign destination ports |
| Type: | Spot |
| Currency: | US dollar |
| Weight Unit: | Tonne |
| Size: | Bulk, typically 25 mt container |
| Timing: | 4-8 weeks |
| Main Consumer Markets: | Japan, South Korea, the US, India and EU |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | No export duty |
| Frequency: | Bi-weekly, every Tuesday and Thursday |

China EMM Flake 99.7% Mn EXW (dom.)

| | |
|------------------------|--|
| DataLab Name: | Manganese Metal, Electrolytic Flake 99.7% Mn, Spot price; China, EXW |
| Grade: | Mn 99.7% min (electrolytic) |
| Price basis: | China ex-works |
| Credit/Payment terms: | Cash |
| Loading Location: | Producing plant |
| Type: | Spot |
| Currency: | RMB |
| Weight Unit: | Tonne |
| Size: | 100 t + |
| Timing: | n/a |
| Main Consumer Markets: | China mainland |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | VAT included, any other duties excluded |
| Frequency: | Bi-weekly, every Tuesday and Thursday |

US EMM 99.7% Mn EXW

| | |
|------------------------|--|
| DataLab Name: | Manganese Metal, Electrolytic 99.7% Mn, Spot price; USA, ex-warehouse |
| Grade: | 99.7% Mn |
| Price basis: | US ex-warehouse |
| Credit/Payment terms: | Cash/Net 30-60 standard |
| Packaging: | Bulk |
| Loading Location: | US warehouse, typically Pittsburgh or Chicago |
| Type: | Spot |
| Currency: | US dollar in cents |
| Weight Unit: | Pounds |
| Size: | Truckload or larger |
| Timing: | No more than 16 weeks forward |
| Main Consumer Markets: | US inland terminals/locations |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | Duty paid |

EU EMM 99.7% Mn DDP

| | |
|------------------------|--|
| DataLab Name: | Manganese Metal, Electrolytic 99.7% Mn, Spot price; Europe, DDP |
| Grade: | 99.7% Mn |
| Price basis: | Delivered, duty paid, per tonne |
| Credit/Payment terms: | Cash/Net 30-60 standard |
| Packaging: | Bulk |
| Loading Location: | Rotterdam, or producing plant |
| Type: | Spot |
| Currency: | US dollar |
| Weight Unit: | Tonnes |
| Size: | Truckload or larger |
| Timing: | No more than 12 weeks forward |
| Main Consumer Markets: | European inland terminals/locations |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | Duty paid |

Manganese Sulfate

China Manganese sulfate 32% Mn min, EXW

| | |
|-----------------------|--|
| DataLab Name: | China Manganese sulfate 32% Mn min, EXW |
| Grade: | 32% Mn min, Fe 0.001% max, Zn 0.001% max, Cu 0.001% max, Pb 0.001% max, Cd 0.0005% max, K 0.01% max, Na 0.01% max, Ca 0.01% max, Mg 0.01%, max, Ni 0.005% max, Co 0.005% max |
| Price basis: | China ex-works |
| Credit/Payment terms: | Bank acceptance bill/Cash |
| Loading Location: | Producing plant |
| Type: | Spot |
| Currency: | RMB |

| | |
|------------------------|--|
| Weight Unit: | Tonne |
| Size: | 33t + |
| Timing: | n/a |
| Main Consumer Markets: | China mainland |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | VAT included,any other duties excluded |
| Frequency: | Monthly |

Chrome

Ferrochrome

US HC 47-55% Cr EXW *[Discontinued]*

| | |
|------------------------|--|
| DataLab name: | Chrome, High Carbon, 47-55% Cr, Spot price; USA, ex-warehouse |
| Grade: | 47-55% Cr, 6-8% C |
| Price basis: | US ex-warehouse, contained Cr |
| Credit/Payment terms: | Cash/Net 30-60 standard |
| Packaging: | Bulk |
| Loading Location: | US warehouse, typically Pittsburgh or Chicago |
| Type: | Spot |
| Currency: | US dollar in cents |
| Weight Unit: | Pounds |
| Size: | Multiple truckloads |
| Timing: | No more than 12 weeks forward |
| Main Consumer Markets: | US inland terminals/locations |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | Duty paid |

EU HC 47-55% Cr DDP Benchmark

| | |
|------------------------|--|
| DataLab Name: | Chrome, High Carbon, 47-55% Cr, Benchmark, Spot price; Europe, DDP |
| Grade: | 47-55% Cr, 6-8% C |
| Price basis: | South African benchmark minus average discounts |
| Credit/Payment terms: | Cash/Net 30-60 standard |
| Packaging: | Bulk |
| Loading Location: | Rotterdam warehouse or producing plant, additional locations |
| Type: | Benchmark minus discounts |
| Currency: | US dollar in cents |
| Weight Unit: | Pounds |
| Size: | Multiple truckloads |
| Timing: | No more than 12 weeks forward |
| Main Consumer Markets: | European inland terminals/locations |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | Duty paid |

EU HC 47-55% Cr DDP Free Market *[Discontinued]*

| | |
|------------------------|--|
| DataLab Name: | Chrome, High Carbon, 47-55% Cr, Free Market, Spot price; Europe, DDP |
| Grade: | 47-55% Cr, 6-8% C |
| Price basis: | Delivered, Duty paid, contained Cr |
| Credit/Payment terms: | Cash/Net 30-60 standard |
| Packaging: | Bulk |
| Loading Location: | Rotterdam warehouse or producing plant, additional locations |
| Type: | Spot |
| Currency: | US dollar in cents |
| Weight Unit: | Pounds |
| Size: | Multiple truckloads |
| Timing: | No more than 12 weeks forward |
| Main Consumer Markets: | European inland terminals/locations |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | Duty paid |

China HC 49-70% Cr DAP (dom.)

| | |
|-----------------------|--|
| DataLab Name: | Chrome, High Carbon, 49-70% Cr, Spot price; China, DDP |
| Grade: | 49-70% Cr; 6-10% C |
| Price basis: | China ex-producing point/warehouse |
| Credit/Payment terms: | Line of credit/Wire Transfer |
| Loading Location: | Major Chinese stainless mills |
| Type: | Spot |
| Currency: | USD cents |

| | |
|------------------------|--|
| Weight Unit: | Pounds |
| Size: | Truckload volumes |
| Timing: | 2-8 week delivery time |
| Main Consumer Markets: | China inland terminals/locations |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | VAT unpaid for US dollar/VAT paid for Chinese yuan |
| Frequency: | Bi-weekly, every Tuesday and Thursday |

China HC 49-70% Cr CIF (impt.) *[Discontinued]*

| | |
|------------------------|--|
| DataLab Name: | Chrome, High Carbon, 49-70% Cr, Spot price; China, CIF |
| Grade: | 49-70% Cr; 6% C |
| Price basis: | CIF China ports |
| Credit/Payment terms: | Line of credit/Wire Transfer |
| Loading Location: | Major Chinese ports and stainless mills |
| Type: | Spot |
| Currency: | US dollar |
| Weight Unit: | Pounds/Tonne |
| Size: | 25 mt per container |
| Timing: | 4-8 week delivery |
| Main Consumer Markets: | China inland terminals/locations |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | Import duty paid |

China HC 48-63% Cr CIF (impt.)

| | |
|------------------------|--|
| DataLab Name: | Chrome, High Carbon, 49-70% Cr, Spot price; China, CIF |
| Grade: | 48-63% Cr; 6-10% C |
| Price basis: | CIF China ports |
| Credit/Payment terms: | Line of credit/Wire Transfer |
| Loading Location: | Major Chinese ports and stainless mills |
| Type: | Spot |
| Currency: | US dollar |
| Weight Unit: | Pounds/Tonne |
| Size: | 25 mt per container |
| Timing: | 4-8 week delivery |
| Main Consumer Markets: | China inland terminals/locations |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | Import duty paid |
| Frequency: | Bi-weekly, every Tuesday and Thursday |

EU HC 54-60% Cr DDP

| | |
|-----------------------|--|
| DataLab Name: | Chrome, High Carbon, 54-60% Cr, Spot price; Europe, DDP |
| Grade: | 54-60% Cr; 2-4% Si; 0.03-0.04% Ph; 6-8% C |
| Price basis: | Delivered, Duty paid, contained Cr |
| Credit/Payment terms: | Cash/Net 30-60 standard |
| Packaging: | Bulk |
| Loading Location: | Rotterdam warehouse or producing plant, additional locations |
| Type: | Spot |
| Currency: | US dollar in cents |
| Weight Unit: | Pounds |
| Size: | Multiple truckloads |
| Timing: | No more than 12 weeks forward |
| Main Consumer: | European inland terminals/locations |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | Duty paid |

US HC 62-70% Cr EXW

| | |
|-----------------------|---|
| DataLab Name: | Chrome, High Carbon, 62-70% Cr, Spot price; USA, ex-warehouse |
| Grade: | 62-70% Cr; 6-8% C; 1.5% max Si |
| Price basis: | US Ex-warehouse, contained Cr |
| Credit/Payment terms: | Cash/Net 30-60 standard |
| Packaging: | Bulk |
| Loading Location: | US warehouse, typically Pittsburgh or Chicago |

| | |
|------------------------|--|
| Type: | Spot |
| Currency: | US dollar in cents |
| Weight Unit: | Pounds |
| Size: | Multiple truckloads |
| Timing: | No more than 12 weeks forward |
| Main Consumer Markets: | US inland terminals/locations |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | Duty paid |

EU HC 62-70% Cr DDP *[Discontinued]*

| | |
|------------------------|--|
| DataLab Name: | Chrome, High Carbon, 62-70% Cr, Spot price; Europe, DDP |
| Grade: | 62-70% Cr; 6-8% C; 1.5% max Si |
| Price basis: | Delivered, Duty paid, contained Cr |
| Credit/Payment terms: | Cash/Net 30-60 standard |
| Packaging: | Bulk |
| Loading Location: | Rotterdam warehouse or producing plant, additional locations |
| Type: | Spot |
| Currency: | US dollar in cents |
| Weight Unit: | Pounds |
| Size: | Multiple truckloads |
| Timing: | No more than 12 weeks forward |
| Main Consumer Markets: | European inland terminals/locations |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | Duty paid |

EU HC 65-70% Cr DDP

| | |
|------------------------|--|
| DataLab Name: | Chrome, High Carbon, 65-70% Cr, Spot price; Europe, DDP |
| Grade: | 65-70% Cr; 6-8% C; 1.5% max Si |
| Price basis: | Delivered, Duty paid, contained Cr |
| Credit/Payment terms: | Cash/Net 30-60 standard |
| Packaging: | Bulk |
| Loading Location: | Location: Rotterdam warehouse or producing plant, additional locations |
| Type: | Spot |
| Currency: | US dollar in cents |
| Weight Unit: | Pounds |
| Size: | Multiple truckloads |
| Timing: | No more than 12 weeks forward |
| Main Consumer Markets: | European inland terminals/locations |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | Duty paid |

EU HC 60-64.9% Cr DDP

| | |
|------------------------|--|
| DataLab Name: | Chrome, High Carbon, 60-64.9% Cr, Spot price; Europe, DDP |
| Grade: | 60-64.9% Cr; 6-9% C; 3% max Si |
| Price basis: | Delivered, Duty paid, contained Cr |
| Credit/Payment terms: | Cash/Net 30-60 standard |
| Packaging: | Bulk |
| Loading Location: | Rotterdam warehouse or producing plant, additional locations |
| Type: | Spot |
| Currency: | US dollar in cents |
| Weight Unit: | Pounds |
| Size: | Multiple truckloads |
| Timing: | No more than 12 weeks forward |
| Main Consumer Markets: | European inland terminals/locations |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | Duty paid |

US LC 0.05% C EXW

| | |
|-----------------------|--|
| DataLab Name: | Chrome, Low Carbon, 0.05% C, Spot price; USA, ex-warehouse |
| Grade: | 65-70% Cr; 0.05 C |
| Price basis: | US Ex-warehouse, contained Cr |
| Credit/Payment terms: | Cash/Net 30-60 standard |

| | |
|------------------------|--|
| Packaging: | Bulk |
| Loading Location: | US warehouse, typically Pittsburgh or Chicago |
| Type: | Spot |
| Currency: | US dollar in cents |
| Weight Unit: | Pounds |
| Size: | Minimum 10 mt |
| Timing: | No more than 12 weeks forward |
| Main Consumer Markets: | US inland terminals/locations |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | Duty paid |

EU LC 0.05% C DDP

| | |
|------------------------|--|
| DataLab Name: | Chrome, Low Carbon, 0.05% C, Spot price; Europe, DDP |
| Grade: | 65-70% Cr; 0.05 C |
| Price basis: | Delivered, Duty paid, contained Cr |
| Credit/Payment terms: | Cash/Net 30-60 standard |
| Packaging: | Bulk |
| Loading Location: | Rotterdam warehouse or producing plant, additional locations |
| Type: | Spot |
| Currency: | US dollar in cents |
| Weight Unit: | Pounds |
| Size: | Single truckload |
| Timing: | No more than 12 weeks forward |
| Main Consumer Markets: | European inland terminals/locations |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | Duty paid |

US LC 0.10% C EXW

| | |
|------------------------|--|
| DataLab Name: | Chrome, Low Carbon, 0.10% C, Spot price; USA, ex-warehouse |
| Grade: | 65-70% Cr; 0.10 C |
| Price basis: | US ex-warehouse, contained Cr |
| Credit/Payment terms: | Cash/Net 30-60 standard |
| Packaging: | Bulk |
| Loading Location: | US warehouse, typically Pittsburgh or Chicago |
| Type: | Spot |
| Currency: | US dollar in cents |
| Weight Unit: | Pounds |
| Size: | Single truckload |
| Timing: | No more than 12 weeks forward |
| Main Consumer Markets: | US inland terminals/locations |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | Duty paid |

EU LC 0.10% C DDP

| | |
|------------------------|--|
| DataLab Name: | Chrome, Low Carbon, 0.10% C, Spot price; Europe, DDP |
| Grade: | 65-70% Cr; 0.10 C |
| Price basis: | Delivered, duty paid, contained Cr |
| Credit/Payment terms: | Cash/Net 30-60 standard |
| Packaging: | Bulk |
| Loading Location: | Rotterdam warehouse or producing plant, additional locations |
| Type: | Spot |
| Currency: | US dollar in cents |
| Weight Unit: | Pounds |
| Size: | Multiple truckloads |
| Timing: | No more than 12 weeks forward |
| Main Consumer Markets: | European inland terminals/locations |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | Duty paid |

US LC 0.15% C EXW

| | |
|---------------|--|
| DataLab Name: | Chrome, Low Carbon, 0.15% C, Spot price; USA, ex-warehouse |
| Grade: | 65-70% Cr; 0.15 C |

| | |
|------------------------|--|
| Price basis: | US ex-warehouse, contained Cr |
| Credit/Payment terms: | Cash/Net 30-60 standard |
| Packaging: | Bulk |
| Loading Location: | US warehouse, typically Pittsburgh or Chicago |
| Type: | Spot |
| Currency: | US dollar in cents |
| Weight Unit: | Pounds |
| Size: | Single truckload |
| Timing: | No more than 12 weeks forward |
| Main Consumer Markets: | US inland terminals/locations |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | Duty paid |

US FeCr/Sr EXW

| | |
|------------------------|---|
| DataLab Name: | Chrome, Fe Cr/Sr, Spot price; USA, ex-warehouse |
| Grade: | 40% Cr; 40% Si |
| Price basis: | US ex-warehouse |
| Credit/Payment terms: | Cash/Net 30-60 standard |
| Packaging: | Bulk |
| Loading Location: | US warehouse, typically Pittsburgh or Chicago |
| Type: | Spot |
| Currency: | US dollar in cents |
| Weight Unit: | Pounds |
| Size: | Multiple truckloads |
| Timing: | No more than 12 weeks forward |
| Main Consumer Markets: | US inland terminals/locations |
| Pricing: | Formula price based on US FeSi and US HC FeCr 60-70% Cr |
| Duties/Tariffs: | Duty paid |

Japan HC 60-70% CIF

| | |
|------------------------|--|
| DataLab Name: | Chrome, High Carbon, Spot price; Japan, CIF |
| Grade: | 60-70% |
| Price basis: | CIF major Japanese port, contained Cr |
| Credit/Payment terms: | Cash/Net 30 days |
| Packaging: | Bulk |
| Loading Location: | Producing ports |
| Type: | Spot |
| Currency: | US cents |
| Weight Unit: | Pounds |
| Size: | Multiple containers or larger |
| Timing: | No more than eight weeks forward, with some leeway for holidays |
| Main Consumer Markets: | Japan inland terminals/locations |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | VAT unpaid |

Japan LC 0.1% CIF

| | |
|------------------------|--|
| DataLab Name: | Chrome, Low Carbon, 0.10% C, Spot price; Japan, CIF |
| Grade: | 0.10 C |
| Price basis: | CIF major Japanese port, contained Cr |
| Credit/Payment terms: | Cash/Net 30 days |
| Packaging: | Bulk |
| Loading Location: | Producing ports |
| Type: | Spot |
| Currency: | US cents |
| Weight Unit: | Pounds |
| Size: | Multiple containers or larger |
| Timing: | No more than 12 weeks forward, with some leeway for holidays |
| Main Consumer Markets: | Japan inland terminals/locations |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | VAT unpaid |

Chrome Ore

China Lump 42% Cr CIF (TR orig.)

| | |
|------------------------|--|
| DataLab Name: | Chrome, Lump, 42% Cr, Spot Price; Turkey origin, CIF |
| Grade: | 42% lumpy, 2:6:1 Cr to Fe ratio |
| Price basis: | CIF Chinese main port |
| Credit/Payment terms: | Cash/Net 30-60 standard |
| Packaging: | Bulk, container |
| Loading Location: | Turkish main port |
| Type: | Spot |
| Currency: | US dollar |
| Weight Unit: | Dry Tonne |
| Size: | Multiple containers or larger |
| Timing: | No more than 12 weeks forward |
| Main Consumer Markets: | China inland terminals/locations |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | Duty paid |
| Frequency: | Bi-weekly, every Tuesday and Thursday |

China Conc. 48% Cr CIF (TR orig.)

| | |
|------------------------|--|
| DataLab Name: | Chrome, Concentrates, 46-48% Cr, Spot price; China, Turkey origin, CIF |
| Grade: | 48% Cr |
| Price basis: | CIF main Chinese port |
| Credit/Payment terms: | Cash/Net 30-60 standard |
| Packaging: | Bulk, container |
| Loading Location: | Turkish main port |
| Type: | Spot |
| Currency: | US dollar |
| Weight Unit: | Dry Tonne |
| Size: | Multiple containers or larger |
| Timing: | No more than 12 weeks forward |
| Main Consumer Markets: | China inland terminals/locations |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | Duty paid |
| Frequency: | Bi-weekly, every Tuesday and Thursday |

China Ore 38-40% Cr CIF (ZA orig.)

| | |
|------------------------|--|
| DataLab Name: | Chrome, Concentrates, 38-40% Cr, Spot price; China, South Africa origin, CIF |
| Grade: | 38-40% lumpy |
| Price basis: | CIF main Chinese port |
| Credit/Payment terms: | Cash/Net 30-60 standard |
| Packaging: | Bulk, container |
| Loading Location: | Main South African port |
| Type: | Spot |
| Currency: | US dollar |
| Weight Unit: | Dry Tonne |
| Size: | Multiple containers or larger |
| Timing: | No more than 12 weeks forward |
| Main Consumer Markets: | China inland terminals/locations |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | Duty paid |
| Frequency: | Bi-weekly, every Tuesday and Thursday |

China Conc. 44% Cr CIF (ZA orig.)

| | |
|-----------------------|---|
| DataLab Name: | Chrome, Concentrates, 44% Cr, Spot price; China, South Africa origin, CIF |
| Grade: | 44% Cr |
| Price basis: | CIF Chinese main port |
| Credit/Payment terms: | Cash/Net 30-60 standard |
| Packaging: | Bulk, container |
| Loading Location: | Main South African port |
| Type: | Spot |

| | |
|------------------------|--|
| Currency: | US dollar |
| Weight Unit: | Dry Tonne |
| Size: | Multiple containers or larger |
| Timing: | No more than 12 weeks forward |
| Main Consumer Markets: | China inland terminals/locations |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | Duty paid |
| Frequency: | Bi-weekly, every Tuesday and Thursday |

China UG2 42% Cr CIF (ZA orig.)

| | |
|------------------------|---|
| DataLab Name: | Chrome, UG2 Concentrates, 42% Cr, Spot price; China, South Africa origin, CIF |
| Grade: | 42% Cr |
| Price basis: | CIF main Chinese port |
| Credit/Payment terms: | Cash/Net 30-60 standard |
| Packaging: | Bulk, container |
| Loading Location: | Main South African port |
| Type: | Spot |
| Currency: | US dollar |
| Weight Unit: | Tonne |
| Size: | Multiple containers or larger |
| Timing: | No more than 12 weeks forward |
| Main Consumer Markets: | China inland terminals/locations |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | No |
| Frequency: | Bi-weekly, every Tuesday and Thursday |

China UG2 42% Cr (ZA orig.) FOT Tianjin

| | |
|------------------------|---|
| DataLab Name: | Chrome, UG2 Concentrates, 42% Cr, Spot price; China, South Africa origin, FOT |
| Grade: | 42% Cr |
| Price basis: | FOT Tianjin port, per dmtu |
| Credit/Payment terms: | Cash |
| Packaging: | Bulk, container |
| Loading Location: | Producing plant |
| Type: | Spot |
| Currency: | RMB |
| Weight Unit: | Dry tonne |
| Size: | Multiple containers or larger |
| Timing: | n/a |
| Main Consumer Markets: | Smelters in China and traders |
| Pricing: | Business reported by sellers to buyers |
| Duties/Tariffs: | Duty paid |
| Frequency: | Bi-weekly, every Tuesday and Thursday |

Chrome Metal

US Aluminothermic 99% Cr EXW

| | |
|------------------------|--|
| DataLab Name: | Chrome, Aluminothermic, 99% Cr, Spot price; USA, ex-warehouse |
| Grade: | Aluminothermic chrome metal, 99% Cr |
| Price basis: | US ex-warehouse |
| Credit/Payment terms: | Cash/Net 30-60 standard |
| Packaging: | Bulk |
| Loading Location: | US warehouse, typically Pittsburgh or Chicago |
| Type: | Spot |
| Currency: | US dollar |
| Weight Unit: | Pounds |
| Size: | 5 mt |
| Timing: | No more than 12 weeks forward |
| Main Consumer Markets: | US inland terminals/locations |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | Duty paid |

EU Aluminothermic 99% Cr DDP

| | |
|------------------------|--|
| DataLab Name: | Chrome, Aluminothermic, 99% Cr, Spot price; Europe, DDP |
| Grade: | Aluminothermic chrome metal, 99% Cr |
| Price basis: | Delivered, Duty Paid, per Tonne |
| Credit/Payment terms: | Cash/Net 30-60 standard |
| Packaging: | Bulk |
| Loading Location: | Rotterdam |
| Type: | Spot |
| Currency: | US dollar |
| Weight Unit: | Tonne |
| Size: | Partial and Full Truckloads |
| Timing: | No more than 12 weeks forward |
| Main Consumer Markets: | EU inland terminals/locations |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | Duty paid |

Molybdenum

Ferromolybdenum

US FeMo 65% Mo EXW

DataLab Name:

| | |
|------------------------|--|
| Grade: | Molybdenum, FeMo, Spot price; USA, EXW |
| Price basis: | 65% min Mo – 0.5% Cu; 1.5% Si; 0.06% P; 0.1% C; 0.1% S. |
| Credit/Payment terms: | US ex-warehouse |
| Loading Location: | Cash/Net 30 |
| Type: | Major US ports/warehouse; domestic destinations only |
| Currency: | Spot |
| Weight Unit: | US dollar |
| Size: | Pounds of Mo |
| Timing: | 5 mt |
| Main Consumer Markets: | No more than 8 weeks forward |
| Pricing: | US terminals/locations |
| Duties/Tariffs: | Business reported by sellers to buyers – no inter-trade activity |
| | Duty paid |

EU FeMo 65% Mo DDP

DataLab Name:

| | |
|------------------------|--|
| Grade: | Molybdenum, FeMo, Spot price; Europe, DDP |
| Price basis: | 65% min Mo – 0.5% Cu; 1.5% Si; 0.06% P; 0.1% C; 0.1% S. |
| Credit/Payment terms: | DDP |
| Loading Location: | Cash/Net 30 |
| Type: | Major European ports/warehouse |
| Currency: | Spot |
| Weight Unit: | US dollar |
| Size: | Kilos of Mo |
| Timing: | 10 mt to 20 mt (partial and full truckloads) |
| Main Consumer Markets: | No more than 8 weeks forward |
| Pricing: | European terminals/locations |
| Duties/Tariffs: | Business reported by sellers to buyers – no inter-trade activity |
| | Duty paid |

China FeMo 60% Mo DAP

DataLab Name:

| | |
|------------------------|--|
| Grade: | Molybdenum, FeMo, Spot price; China, DAP |
| Price basis: | 60% min Mo |
| Credit/Payment terms: | Delivered consumer |
| Type: | Cash/Net 30 days |
| Currency: | Spot |
| Weight Unit: | Rmb |
| Size: | Tonne |
| Timing: | 10 mt to 20 mt (partial and full truckloads) |
| Main Consumer Markets: | No more than four weeks forward, with some leeway for holiday |
| Pricing: | Chinese mills |
| Duties/Tariffs: | Business reported by sellers to buyers – no inter-trade activity |
| Frequency: | VAT included, any other duties excluded |
| | Bi-weekly, every Tuesday and Thursday |

Molybdenum Oxide

US Oxide 60% Mo EXW

DataLab Name:

| | |
|-----------------------|---|
| Grade: | Molybdenum, Oxide, Spot price; USA, EXW |
| Price basis: | 60% min Mo – 0.5% Cu, 0.1% P, lead and sulfur |
| Credit/Payment terms: | US ex-warehouse |
| Loading Location: | Cash/Net 30 |
| Type: | Major US ports/warehouse |
| Currency: | Spot |
| | US dollar |

| | |
|------------------------|--|
| Weight Unit: | Pounds of Mo |
| Size: | 5 mt packed in bags or drums |
| Timing: | No more than 8 weeks forward |
| Main Consumer Markets: | US terminals/locations |
| Pricing: | Business reported by sellers to buyers – no inter-trade activity |
| Duties/Tariffs: | Duty paid |

EU Oxide 60% Mo EXW

| | |
|------------------------|--|
| DataLab Name: | Molybdenum, Oxide, Spot price; Europe, EXW |
| Grade: | 60% min Mo – 0.5% Cu, 0.1% P, lead and sulfur |
| Price basis: | EXW |
| Credit/Payment terms: | Cash/Net 30 |
| Loading Location: | Major Europe ports/warehouse |
| Type: | Spot |
| Currency: | US dollar |
| Weight Unit: | Pounds of Mo |
| Size: | 10 mt to 20 mt (partial and full truckloads) packed in bags or drums |
| Timing: | No more than 8 weeks forward |
| Main Consumer Markets: | Western Europe terminals/locations |
| Pricing: | Business reported by sellers to buyers – no inter-trade activity |
| Duties/Tariffs: | Duty paid |

Main Asia Ports Oxide CIF

| | |
|------------------------|---|
| DataLab Name: | Molybdenum, Oxide, Spot price; Asia, Main ports, CIF |
| Grade: | 60% min Mo – 0.5% Cu, 0.1% P, lead and sulfur |
| Price basis: | CIF Main Asia Ports (other locations in the Asian region may be reflected in the assessment after normalisation) |
| Credit/Payment terms: | Cash/Net 30 days |
| Type: | Spot |
| Currency: | US dollar |
| Weight Unit: | Pounds of Mo |
| Size: | 10 mt to 20 mt (partial and full truckloads) packed in bags or drums |
| Timing: | No more than four weeks forward, with some leeway for holiday |
| Main Consumer Markets: | Japanese, Chinese, S. Korean terminals/locations (other locations in the Asian region may be reflected in the assessment after normalisation) |
| Pricing: | Business reported by sellers to buyers – no inter-trade activity |
| Duties/Tariffs: | Duty paid |
| Frequency: | Weekly, every Friday |

EU Moly Metal DDP

| | |
|------------------------|--|
| DataLab Name: | EU Mo Metal 99.8% DDP |
| Grade: | 99.8% min Mo |
| Price basis: | Delivered, Duty Paid, per Kilo |
| Credit/Payment terms: | Cash/Net 30 |
| Loading Location: | Major Europe ports/warehouse |
| Type: | Spot |
| Currency: | US dollar |
| Weight Unit: | Kilogramme |
| Size: | 5 mt to 20 mt |
| Timing: | No more than 8 weeks forward |
| Main Consumer Markets: | Western Europe terminals/locations |
| Pricing: | Business reported by sellers to buyers – no inter-trade activity |
| Duties/Tariffs: | Duty paid |

Noble Alloys & Minor Metals

Ferrotitanium

US FeTi 68-72% Ti EXW

| | |
|------------------------|--|
| DataLab Name: | Ferrotitanium, 68-72% Ti, Spot price; USA, ex-warehouse |
| Grade: | 68-72% min Ti – max: 0.5% N; 0.2% C; 6% Al; 1% Sn; 3% V |
| Price basis: | US ex-warehouse |
| Credit/Payment terms: | Cash/Net 30 |
| Loading Location: | Major US ports/warehouse |
| Type: | Spot |
| Currency: | US dollar |
| Weight Unit: | Pounds of Ti |
| Size: | Minimum 5 mt |
| Timing: | No more than 8 weeks forward |
| Main Consumer Markets: | US terminals/locations |
| Pricing: | Business reported by sellers to buyers – no inter-trade activity |
| Duties/Tariffs: | Duty paid |

EU FeTi 68-72% Ti DDP

| | |
|------------------------|--|
| DataLab Name: | Ferrotitanium, 68-72% Ti, Spot price; Europe, DDP |
| Grade: | 68-72% min Ti – max: 0.5% N; 0.2% C; 6% Al; 1% Sn; 3% V |
| Price basis: | DDP |
| Credit/Payment terms: | Cash/Net 30 |
| Loading Location: | Major European ports/warehouse |
| Type: | Spot |
| Currency: | US dollar |
| Weight Unit: | Kilograms of Ti |
| Size: | Minimum 2 mt |
| Timing: | No more than 8 weeks forward |
| Main Consumer Markets: | European terminals/locations |
| Pricing: | Business reported by sellers to buyers – no inter-trade activity |
| Duties/Tariffs: | Duty paid |

Ferrotungsten

US FeW 72-75% W EXW

| | |
|------------------------|--|
| DataLab Name: | Ferrotungsten, 72-75% W, Spot price; USA, ex-warehouse |
| Grade: | 72-75% min W – 0.5% Si, 0.05% Cu, 0.25% Mn, 0.2% C |
| Price basis: | US ex-warehouse |
| Credit/Payment terms: | Cash/Net 30 |
| Loading Location: | Major US ports/warehouse |
| Type: | Spot |
| Currency: | US dollar |
| Weight Unit: | Pounds of W |
| Size: | 2 mt to 10 mt uncrushed 100x10, packed in 100-kilo drums. |
| Timing: | No more than 8 weeks forward |
| Main Consumer Markets: | US terminals/locations |
| Pricing: | Business reported by sellers to buyers – no inter-trade activity |
| Duties/Tariffs: | Duty paid |

EU FeW 72-75% W DDP

| | |
|-----------------------|--|
| DataLab Name: | Ferrotungsten, 72-75% W, Spot price; Europe, DDP |
| Grade: | 72-75% min W – 0.5% Si, 0.05% Cu, 0.25% Mn, 0.2% C |
| Price basis: | DDP |
| Credit/Payment terms: | Cash/Net 30 |
| Loading Location: | Major European ports/warehouse |
| Type: | Spot |

| | |
|------------------------|--|
| Currency: | US dollar |
| Weight Unit: | Kilograms of W |
| Size: | Minimum 2 mt |
| Timing: | No more than 8 weeks forward |
| Main Consumer Markets: | European terminals/locations |
| Pricing: | Business reported by sellers to buyers – no inter-trade activity |
| Duties/Tariffs: | Duty paid |

Ferrovandium

US FeV 80% V EXW

DataLab Name:

Ferrovandium, 80% V, Spot price; USA, ex-warehouse

| | |
|------------------------|--|
| Grade: | 80% min V – 1.50%max Al; 1.50%max Si; 0.25%max C; 0.05%max S; 0.05%max P |
| Price basis: | US ex-warehouse |
| Credit/Payment terms: | Cash/Net 30 |
| Loading Location: | Major US ports/warehouse |
| Type: | Spot |
| Currency: | US dollar |
| Weight Unit: | Pounds of V |
| Size: | 5 mt packed in 25-lb bags of V on pallets |
| Timing: | No more than 8 weeks forward |
| Main Consumer Markets: | US terminals/locations |
| Pricing: | Business reported by sellers to buyers – no inter-trade activity |
| Duties/Tariffs: | Duty paid |

EU FeV 80% V DDP

DataLab Name:

Ferrovandium, 80% V, Spot price; Europe, DDP

| | |
|------------------------|--|
| Grade: | 80% min V – 1.50%max Al; 1.50%max Si; 0.25%max C; 0.05%max S; 0.05%max P |
| Price basis: | DDP |
| Credit/Payment terms: | Cash/Net 30 |
| Loading Location: | Major Europe ports/warehouse |
| Type: | Spot |
| Currency: | US dollar |
| Weight Unit: | Kilograms of V |
| Size: | Minimum 5 mt packed in 250kg drums or supersacks |
| Timing: | No more than 8 weeks forward |
| Main Consumer Markets: | Europe terminals/locations |
| Pricing: | Business reported by sellers to buyers – no inter-trade activity |
| Duties/Tariffs: | Duty paid |

Tantalum

US Ta Ore 30% Ta EXW [Discontinued]

DataLab Name:

Tantalum Ore, 30% Ta₂O₅, Spot price; USA, ex-warehouse

| | |
|------------------------|--|
| Grade: | 30% Ta |
| Price basis: | US ex-warehouse |
| Credit/Payment terms: | Cash/Net 30 |
| Loading Location: | Major US ports/warehouse |
| Type: | Spot |
| Currency: | US dollar |
| Weight Unit: | Pounds of Ta |
| Size: | 2 mt to 5 mt. |
| Timing: | No more than 8 weeks forward |
| Main Consumer Markets: | US terminals/locations |
| Pricing: | Business reported by sellers to buyers – no inter-trade activity |
| Duties/Tariffs: | Duty paid |

Tungsten

US W Ore 65% WO3 EXW *[Discontinued]*

| | |
|------------------------|--|
| DataLab name: | Tungsten Ore, 65% WO3, Spot price; US, ex-warehouse |
| Grade: | 65% min WO3 – S 0.7% max S; 0.05% max P; 0.15% max As; 0.13% max Cu; 0.2% max Sn; 7% max SiO2; 5% max Ca |
| Price basis: | US ex-warehouse |
| Credit/Payment terms: | Cash/Net 30 |
| Loading Location: | Major US ports/warehouse |
| Type: | Spot |
| Currency: | US dollar |
| Weight Unit: | Pounds of W |
| Size: | 5 mt to 10 mt |
| Timing: | No more than 8 weeks forward |
| Main Consumer Markets: | US terminals/locations |
| Pricing: | Business reported by sellers to buyers – no inter-trade activity |
| Duties/Tariffs: | Duty paid |

US W APT 88.5% WO3 EXW *[Discontinued]*

| | |
|------------------------|--|
| DataLab Name: | Tungsten APT, 88.5% WO3, Spot price; USA, ex-warehouse |
| Grade: | 88%.5 WO3 |
| Price basis: | US ex-warehouse |
| Credit/Payment terms: | Cash/Net 30 |
| Loading Location: | Major US ports/warehouse |
| Type: | Spot |
| Currency: | US dollar |
| Weight Unit: | Pounds of W |
| Size: | 5 mt to 10 mt |
| Timing: | No more than 8 weeks forward |
| Main Consumer Markets: | US terminals/locations |
| Pricing: | Business reported by sellers to buyers – no inter-trade activity |
| Duties/Tariffs: | Duty paid |

China FeW 72-75% W FOB

| | |
|------------------------|--|
| DataLab Name: | Ferrotungsten, 72-75% W, Spot price; China, FOB |
| Grade: | 72-75% min W – S: 0.08% max; P: 0.05% max; C: 0.4% max; Si: 0.7% max; Mn: 0.5% max |
| Price basis: | Per kg W, fob China |
| Credit/Payment terms: | Cash |
| Loading Location: | Chinese ports |
| Type: | Spot |
| Currency: | US dollar |
| Weight Unit: | Tonne |
| Size: | 10 mt min |
| Timing: | 1-6 weeks |
| Main Consumer Markets: | Japan, South Korea, the US, and EU |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | No export duty |
| Frequency: | Bi-weekly, every Tuesday and Thursday |

China tungsten concentrate 65% WO3 – domestic DAP

| | |
|-----------------------|---|
| DataLab Name: | Tungsten Ore, 60% WO3, Spot price; China, DAP |
| Grade: | WO3: 65% max; S: 0.8% max; P: 0.10% max; As: 0.15% max; Mo: 0.05% max; Ca: 5% max; Mn: 1.5% max; Cu: 0.25% max; Sn: 0.25% max; SiO2: 7.0% max |
| Price basis: | Per mt, delivered place, mainly Jiangxi |
| Credit/Payment terms: | Cash |
| Loading Location: | Producing plant |
| Type: | Spot |
| Currency: | RMB |
| Weight Unit: | Tonne |
| Size: | 50t min |

| | |
|------------------------|--|
| Timing: | n/a |
| Main Consumer Markets: | Middle and east China |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | VAT included, any other duties excluded |
| Frequency: | Bi-weekly, every Tuesday and Thursday |

China APT 88.5% DAP

| | |
|------------------------|--|
| DataLab Name: | Tungsten APT, 88.5% WO₃, Spot price; China, DAP |
| Grade: | WO ₃ : 88.5% min |
| Price basis: | Per mt, delivered place, mainly Hunan, Fujian, Sichuan |
| Credit/Payment terms: | Cash |
| Loading Location: | Producing plant |
| Type: | Spot |
| Currency: | RMB |
| Weight Unit: | Tonne |
| Size: | 20t min |
| Timing: | n/a |
| Main Consumer Markets: | Central, eastern and southern China |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | VAT included, any other duties excluded |
| Frequency: | Bi-weekly, every Tuesday and Thursday |

China APT 88.5% WO₃ FOB

| | |
|------------------------|--|
| DataLab Name: | Tungsten APT, 88.5% WO₃, Spot price; China, FOB |
| Grade: | WO ₃ : 88.5% min |
| Price basis: | Per mtu WO ₃ , fob China |
| Credit/Payment terms: | Cash |
| Loading Location: | Chinese ports |
| Type: | Spot |
| Currency: | US dollar |
| Weight Unit: | Tonne |
| Size: | 17t min |
| Timing: | 1-6 weeks |
| Main Consumer Markets: | Japan, South Korea, the US, and EU |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | No export duty |
| Frequency: | Bi-weekly, every Tuesday and Thursday |

Vanadium

China V₂O₅ 98% V FOB

| | |
|------------------------|---|
| DataLab Name: | Vanadium, V₂O₅ 98% V, Spot price; China, FOB |
| Grade: | 98% V |
| Price basis: | FOB China |
| Credit/Payment terms: | Cash/Net 30 |
| Loading Location: | Major Chinese ports |
| Type: | Spot |
| Currency: | US dollar |
| Weight Unit: | Pound |
| Size: | 5 mt to 10 mt |
| Timing: | No more than 8 weeks forward |
| Main Consumer Markets: | US terminals/locations |
| Pricing: | Business reported by sellers to buyers – no inter-trade activity |
| Duties/Tariffs: | Duty paid |
| Frequency: | Bi-weekly, every Tuesday and Thursday |

China V₂O₅ 98% V DAP (dom.)

| | |
|-----------------------|---|
| DataLab Name: | Vanadium, V₂O₅ 98% V, Spot price; China, DAP |
| Grade: | 98% V |
| Price basis: | DAP China |
| Credit/Payment terms: | Cash/Net 30 |

| | |
|------------------------|--|
| Loading Location: | Major Chinese ports |
| Type: | Spot |
| Currency: | Chinese RMB |
| Weight Unit: | Tonne |
| Size: | 5 mt to 10 mt |
| Timing: | No more than four weeks forward, with some leeway for holiday |
| Main Consumer Markets: | Chinese inland terminals/locations |
| Pricing: | Business reported by sellers to buyers – no inter-trade activity |
| Duties/Tariffs: | Duty paid |
| Frequency: | Bi-weekly, every Tuesday and Thursday |

Minor Metals

US Antimony 99.65% Sb EXW

| | |
|------------------------|--|
| DataLab Name: | Antimony, 99.65% Sb, Spot price; USA, ex-warehouse |
| Grade: | 99.65% min Sb ingot, max 0.15% As, max 50 ppm Se, balance Pb |
| Price basis: | US ex-warehouse |
| Credit/Payment terms: | Cash/Net 30 |
| Loading Location: | Major US ports/warehouse; domestic destinations only |
| Type: | Spot |
| Currency: | US dollar |
| Weight Unit: | Pounds |
| Size: | 10 mt to 20 mt (partial and full truckloads) |
| Timing: | No more than 8 weeks forward |
| Main Consumer Markets: | US inland terminals/locations |
| Pricing: | Business reported by sellers to buyers – no inter-trade activity |
| Duties/Tariffs: | Duty paid |

EU Antimony 99.65% Sb EXW

| | |
|------------------------|---|
| DataLab Name: | Antimony, 99.65% Sb, Spot price; Europe, ex-warehouse |
| Grade: | 99.65% min Sb ingot, max 0.15% As, max 50 ppm Se, balance Pb |
| Price basis: | EU ex-warehouse |
| Credit/Payment terms: | Cash/Net 30 |
| Loading Location: | Rotterdam |
| Type: | Spot |
| Currency: | US dollar |
| Weight Unit: | Tonne |
| Size: | 10 mt to 20 mt (partial and full truckloads) |
| Timing: | No more than 8 weeks forward |
| Main Consumer Markets: | EU inland terminals/locations |
| Pricing: | Business reported by sellers to buyers – no inter-trade activity |
| Duties/Tariffs: | Duty paid |

US Bismuth 99.99% Bi EXW

| | |
|------------------------|---|
| DataLab Name: | Bismuth, 99.99% Bi, Spot price; USA, ex-warehouse |
| Grade: | 99.99% min Bi ingot/shot |
| Price basis: | US ex-warehouse |
| Credit/Payment terms: | Cash/Net 30 |
| Loading Location: | Major US ports/warehouse; domestic destinations only |
| Type: | Spot |
| Currency: | US dollar |
| Weight Unit: | Pounds |
| Size: | 1 mt to 5 mt (small volume lots) |
| Timing: | No more than 8 weeks forward |
| Main Consumer Markets: | US inland terminals/locations |
| Pricing: | Business reported by sellers to buyers – no inter-trade activity |
| Duties/Tariffs: | Duty paid |

EU Bismuth 99.99% Bi EXW

| | |
|---------------|--|
| DataLab Name: | Bismuth, 99.99% Bi, Spot price; Europe, ex-warehouse |
| Grade: | 99.99% min Bi ingot/shot |

| | |
|------------------------|--|
| Price basis: | EU ex-warehouse |
| Credit/Payment terms: | Cash/Net 30 |
| Loading Location: | Rotterdam |
| Type: | Spot |
| Currency: | US dollar |
| Weight Unit: | Pounds |
| Size: | 1 mt to 5 mt (small volume lots) |
| Timing: | No more than 8 weeks forward |
| Main Consumer Markets: | EU inland terminals/locations |
| Pricing: | Business reported by sellers to buyers – no inter-trade activity |
| Duties/Tariffs: | Duty paid |

US Cadmium 99.95% Cd EXW

| | |
|------------------------|--|
| DataLab Name: | Cadmium, 99.95% Cd, Spot price; USA, ex-warehouse |
| Grade: | 99.95% min Cd sticks |
| Price basis: | US ex-warehouse |
| Credit/Payment terms: | Cash/Net 30 |
| Loading Location: | Major US ports/warehouse; domestic destinations only |
| Type: | Spot |
| Currency: | US dollar |
| Weight Unit: | Pounds |
| Size: | 500 lb to 5 mt (small volume lots) |
| Timing: | No more than 8 weeks forward |
| Main Consumer Markets: | US inland terminals/locations |
| Pricing: | Business reported by sellers to buyers – no inter-trade activity |
| Duties/Tariffs: | Duty paid |

EU Cadmium 99.95% Cd EXW

| | |
|------------------------|--|
| DataLab Name: | Cadmium, 99.95% Cd, Spot price; Europe, ex-warehouse |
| Grade: | 99.95% min Cd sticks |
| Price basis: | EU ex-warehouse |
| Credit/Payment terms: | Cash/Net 30 |
| Loading Location: | Rotterdam |
| Type: | Spot |
| Currency: | US dollar |
| Weight Unit: | Pounds |
| Size: | 500 lb to 5 mt (small volume lots) |
| Timing: | No more than 8 weeks forward |
| Main Consumer Markets: | US inland terminals/locations |
| Pricing: | Business reported by sellers to buyers – no inter-trade activity |
| Duties/Tariffs: | Duty paid |

US Indium 99.99% In EXW

| | |
|------------------------|--|
| DataLab Name: | Indium, 99.99% In, Spot price; USA, ex-warehouse |
| Grade: | 99.99% min In |
| Price basis: | US ex-warehouse |
| Credit/Payment terms: | Cash/Net 30 |
| Loading Location: | Major US ports/warehouse; domestic destinations only |
| Type: | Spot |
| Currency: | US dollar |
| Weight Unit: | Kilos |
| Size: | 100 kg lots |
| Timing: | No more than 8 weeks forward |
| Main Consumer Markets: | US inland terminals/locations |
| Pricing: | Business reported by sellers to buyers – no inter-trade activity |
| Duties/Tariffs: | Duty paid |

EU Indium 99.99% In EXW

| | |
|-----------------------|---|
| DataLab Name: | Indium, 99.99% In, Spot price; Europe, ex-warehouse |
| Grade: | 99.99% min In |
| Price basis: | EU ex-warehouse |
| Credit/Payment terms: | Cash/Net 30 |

| | |
|------------------------|--|
| Loading Location: | Rotterdam |
| Type: | Spot |
| Currency: | US dollar |
| Weight Unit: | Kilos |
| Size: | 100 kg lots |
| Timing: | No more than 8 weeks forward |
| Main Consumer Markets: | EU inland terminals/locations |
| Pricing: | Business reported by sellers to buyers – no inter-trade activity |
| Duties/Tariffs: | Duty paid |

US Selenium 99.5% Se EXW

| | |
|------------------------|---|
| DataLab Name: | Selenium, 99.5% Se, Spot price; USA, ex-warehouse |
| Grade: | 99.5% min Se – min 200 mesh |
| Price basis: | US ex-warehouse |
| Credit/Payment terms: | Cash/Net 30 |
| Loading Location: | Major US ports/warehouse; domestic destinations only |
| Type: | Spot |
| Currency: | US dollar |
| Weight Unit: | Pounds |
| Size: | 500kg to 5 mt (small lot transactions) |
| Timing: | No more than 8 weeks forward |
| Main Consumer Markets: | US inland terminals/locations |
| Pricing: | Business reported by sellers to buyers – no inter-trade activity |
| Duties/Tariffs: | Duty paid |

EU Selenium 99.5% Se EXW

| | |
|------------------------|--|
| DataLab Name: | Selenium, 99.5% Se, Spot price; Europe, ex-warehouse |
| Grade: | 99.5% min Se – min 200 mesh |
| Price basis: | EU ex-warehouse |
| Credit/Payment terms: | Cash/Net 30 |
| Loading Location: | Rotterdam |
| Type: | Spot |
| Currency: | US dollar |
| Weight Unit: | Pounds |
| Size: | 500kg to 5 mt (small lot transactions) |
| Timing: | No more than 8 weeks forward |
| Main Consumer Markets: | EU inland terminals/locations |
| Pricing: | Business reported by sellers to buyers – no inter-trade activity |
| Duties/Tariffs: | Duty paid |

Cobalt

EU 99.8% Co DDP

| | |
|------------------------|--|
| DataLab Name: | Cobalt, 99.8% Co, Spot price; Europe, DDP |
| Grade: | 99.8% min Co |
| Price basis: | Delivered, duty paid, per pound |
| Credit/Payment terms: | Cash/Net 30-60 standard |
| Loading Location: | Rotterdam |
| Type: | Spot |
| Currency: | US Dollar |
| Weight Unit: | Pound |
| Size: | min 1 tonne |
| Timing: | No more than 8 weeks forward |
| Main Consumer Markets: | European inland terminals/locations |
| Pricing: | Business reported by sellers to buyers, including producers to traders |

US 99.8% Co EXW

| | |
|---------------|---|
| DataLab Name: | Cobalt, 99.8% Co, Spot price; USA, ex-warehouse |
| Grade: | 99.8% min Co |
| Price basis: | US ex-warehouse |

| | |
|------------------------|--|
| Credit/Payment terms: | Cash/Net 30-60 standard |
| Loading Location: | Major US ports/warehouse; domestic destinations only |
| Type: | Spot |
| Currency: | US Dollar |
| Weight Unit: | Pound |
| Size: | min 1 tonne |
| Timing: | No more than 8 weeks forward |
| Main Consumer Markets: | European inland terminals/locations |
| Pricing: | Business reported by sellers to buyers, including producers to traders |

China 99.8% Co DAP

DataLab Name:

| | |
|------------------------|--|
| Grade: | Cobalt, 99.8% Co, Spot price; China, DAP |
| Price basis: | 99.8% min Co |
| Credit/Payment terms: | DAP |
| Loading Location: | Bank acceptance (other payment normalized) |
| Type: | Producer plant |
| Currency: | Spot - Assessed |
| Weight Unit: | RMB |
| Size: | Metric ton of material |
| Timing: | Min lot size 1 tonne |
| Main Consumer Markets: | No more than 4 weeks forward |
| Pricing: | China |
| Duties/Tariffs: | Business reported by sellers to buyers, including producers to traders |
| Frequency: | VAT included, any other duties excluded |
| | Weekly, every Friday |