

CRU Prices

Lead and Zinc
Methodology and
Definitions Guide

July 2018

CRU Prices.....	1
<i>Methodology and Definitions Guide – Lead and Zinc.....</i>	<i>3</i>
1 Scope.....	3
2 Methodology.....	3
3 Definitions – Zinc premia.....	4
US Midwest ingot P1020.....	4
Europe – Ex Works.....	4
Europe – In Warehouse.....	4
4 Definitions – Lead premia.....	5
4 Definitions – Lead scrap.....	5
5 Definitions – Lead Zinc Concentrates.....	6

Methodology and Definitions Guide – Lead and Zinc

1 Scope

This guide covers lead and zinc products prices in all geographical markets and should be read in conjunction with the *CRU Group Compliance Framework and Methodology Guide*. It details commodity-specific methodology which have precedence, with all other aspects covered by the Group methodology guide.

2 Methodology

CRU collects lead and zinc pricing data as part of its assessment of broader market conditions that are published in the Lead Monitor, Zinc Monitor and Lead and Zinc Concentrates Monitor. These premia, scrap prices and concentrate treatment charges are gathered from regular discussions with a wide network of market participants. This network is frequently reviewed to ensure a balance of buyers and sellers, and to reflect actual activity in the market. CRU also conducts consultations with the market about its methodology – all answers are treated as confidential.

Frequency

Premia, treatment charges and scrap prices are published once a month.

Lead and zinc metal premia and lead scrap prices reflect deals completed in the two weeks prior to the day of publication.

Concentrate treatment charges reflect deals concluded in the calendar month prior to publication.

Assessment Method

Published numbers represent CRU's assessment of the level at which business has been concluded, following discussions with industry participants.

Data are gathered through consultation with producers, consumers and traders. Analysts use telephone and email services to collect premia, scrap prices and treatment charges as well as to clarify the information received.

More weighting is given to transactions that represent larger tonnages. Published figures are calculated as the mid-point between the consensus for buyers and the consensus for sellers. If a market has been quiet with only limited deals concluded, assessments are rolled over.

Deactivated premia, prices and charges

A premium, scrap price or treatment charge will remain active as long as there are sufficient buyers, sellers and/or traders for the analyst to make an accurate assessment. If the quotation suffers from limited transparency or if business dynamics change, it will be deactivated. Its history will still be available, but no further information will be collected for that product from the time it is deactivated.

Sizes and Specifications

Transaction sizes and specifications vary by commodity type – details are listed overleaf.

3 Definitions – Zinc premia

US Midwest ingot P1020

Material:	99.7% purity high-grade aluminium, P1020 Aluminum Association specification
Price basis:	Delivered, duty-paid
Shape/Dimensions:	Ingot, low profile T-bar, sow
Credit/Payment terms:	30 days payment terms
Type:	Spot
Currency:	US dollar
Weight Unit:	Imperial pounds (lbs)
Frequency:	Monthly
Size:	Typical volumes 100-2000 tonnes.
Timing:	Prompt business for 7 to 30 days ahead.
Pricing:	Premium above the official LME cash settlement price for aluminium at the time of contract confirmation.
Duties/Tariffs:	0%.

Europe – Ex Works

Material:	SHG zinc ingot
Price basis:	Ex works
Credit/payment terms:	Prompt net cash
Packaging:	In 1 tonne bundles
Loading location:	Northern Europe
Type:	Spot
Currency:	US dollar
Weight unit:	Metric tonne
Size:	100-500t
Delivery:	Prompt
Pricing:	Basis the Official LME cash settlement price for zinc at the time of contract confirmation, plus premium
Duties/tariffs:	2.5% import duty on material of non EU origin

Europe – In Warehouse

Material:	SHG zinc ingot
Price basis:	In warehouse
Credit/payment terms:	Prompt net cash
Packaging:	In 1 tonne bundles
Loading location:	Northern Europe
Type:	Spot
Currency:	US dollar
Weight unit:	Metric tonne
Size:	100-500t
Delivery:	Prompt delivery of warrant(s)
Pricing:	Basis the official LME cash settlement price for zinc at the time of contract confirmation, plus premium
Duties/tariffs:	2.5% import duty on material of non-EU origin

USA – Midwest Delivered

Material:	SHG zinc ingot
Price basis:	Midwest delivered
Credit/payment terms:	Net cash 30 days
Packaging:	In 1 tonne bundles
Loading location:	North America
Type:	Spot
Currency:	US cent
Weight unit:	US pound (basis short ton = 2,000 lbs)

Size:	100-500t
Timing:	Prompt business for delivery within 1-2 weeks.
Pricing:	Basis the official LME cash settlement price for zinc at the time of contract confirmation, plus premium
Duties/tariffs:	1.5% import duty on material of non-NAFTA origin

Far East - CIF

Material:	SHG zinc ingot
Price basis:	CIF Far Eastern ports
Credit/payment terms:	Prompt net cash
Packaging:	In 1 tonne bundles
Loading location:	Nearby ports
Type:	Spot
Currency:	US dollar
Weight unit:	Metric tonne
Size:	100-500t
Timing:	Prompt business for delivery within 1-2 weeks
Pricing:	Basis the official LME cash settlement price for zinc at the time of contract confirmation, plus premium
Duties/tariffs:	Various

4 Definitions – Lead premia

Northern Europe – Ex Works

Material:	Secondary soft lead (99.97% lead purity)
Price basis:	Ex works
Credit/payment terms:	Prompt net cash
Packaging:	Typically 1 tonne bundles
Loading location:	Northern Europe
Type:	Spot
Currency:	Euro
Weight unit:	Metric tonne
Size:	Varies; typically trades of 100- 500t
Delivery:	Prompt
Pricing:	Basis the average monthly official LME cash settlement price for lead either month prior to or month of delivery, plus premium

USA – Midwest Delivered

Material:	Secondary soft lead (99.97% lead purity)
Price basis:	Mid-West delivered – ‘local’ to the smelter, including up to 2c/lb freight
Credit/payment terms:	Prompt net cash up to 75 days
Packaging:	1 short ton bundles or 1 short ton blocks
Loading location:	North America
Type:	Spot
Currency:	US dollar
Weight unit:	US pound (basis short ton = 2,000 lbs)
Size:	Varies; typically trades of 100- 500t
Timing:	Prompt business for delivery within month
Pricing:	Basis the official LME cash settlement price for lead at the time of contract confirmation, plus premium

4 Definitions – Lead scrap

Picked up US Midwest

Grade:	Whole undrained (wet) used lead-acid automotive battery
Price basis:	Picked up (equivalent to ex-works scrap seller to smelter).
Credit/payment terms:	Cash upon arrival at smelter gates (via wire transfer) to 30 days
Packaging:	Uniformly palletized per BCI standards
Loading location:	North America
Type:	Spot
Currency:	US cents
Weight unit:	US pound
Size:	Typically quoted by 'truckload', which equates to 22 short tons of ULABs.
Timing:	Prompt business for picking up within 1-2 weeks.
Pricing:	Basis the gross weight of whole undrained (wet) used lead-acid automotive battery.

Picked up Europe

Grade:	Whole undrained (wet) used lead-acid automotive battery
Price basis:	Picked up (equivalent to ex-works scrap seller to smelter).
Credit/payment terms:	Cash upon arrival at smelter gates or up to 30 days
Packaging:	Bulk trailers/skips or uniformly palletized to EU standards
Loading location:	Western mainland Europe
Type:	Spot
Currency:	Euro
Weight unit:	Metric tonne
Size:	Typically quoted by 'truckload', which equates to 20 tonnes of ULABs. Some merchants deal in larger quantities of 100-500 tonnes of ULABs.
Timing:	Prompt business for picking up within 1-2 weeks. Larger quantities of 100-500 tonnes within 1 month.
Pricing:	Basis the gross weight of whole undrained (wet) used lead-acid automotive battery.

Picked up UK

Grade:	Whole undrained (wet) used lead-acid automotive battery
Price basis:	Picked up (equivalent to ex-works scrap seller to smelter).
Credit/payment terms:	Cash upon arrival at smelter gates or up to 30 days
Packaging:	Bulk trailers/skips or uniformly palletized to EU standards
Loading location:	UK
Type:	Spot
Currency:	British pound
Weight unit:	Metric tonne
Size:	Typically quoted by 'truckload', which equates to 20 tonnes of ULABs. Some merchants deal in larger quantities of 100-500 tonnes of ULABs.
Timing:	Prompt business for picking up within 1-2 weeks. Larger quantities of 100-500 tonnes within 1 month.
Pricing:	Basis the gross weight of whole undrained (wet) used lead-acid automotive battery.

5 Definitions – Lead Zinc Concentrates

Ex-China spot zinc

Material:	Zinc concentrate of ex-China origin grading 50-55% zinc with no payable by-products or penalty elements
Price basis:	CIF main Chinese port
Type:	Spot
Currency:	US dollar
Weight unit:	Dry metric tonne
Size:	Minimum 5,000 dmt
Delivery:	Prompt to 1 month

Pricing variable:	Treatment charge (TC) per dmt of concentrate (TC is net of price participation where appropriate)
Payment terms:	Buyer pays seller for a portion of the contained zinc less the TC; portion is full content less the greater of 15% of content or 8 percentage points from zinc assay; its value is based on the LME cash price; seller receives prompt payment

Ex-China spot lead

Material:	Lead concentrate of ex-China origin grading 55-65% lead and no more than 400 g/t silver with no other payable by-products or penalty elements
Price basis:	CIF main Chinese port
Type:	Spot
Currency:	US dollar
Weight unit:	Dry metric tonne
Size:	Minimum 5,000 dmt
Delivery:	Prompt to 1 month
Pricing variable:	Treatment charge (TC) per dmt of concentrate (TC is net of price participation where appropriate)
Payment terms:	Buyer pays seller for a portion of the contained lead less the TC; portion is full content less the greater of 5% of content or 3 percentage points from lead assay; its value is based on the average of LME cash and LME 3-month prices; seller receives prompt payment

China spot zinc

Material:	Zinc concentrate of Chinese origin grading 50% zinc with no payable by-products or penalty elements
Price basis:	Delivered to smelter's gate
Type:	Spot
Currency:	Renminbi
Weight unit:	Metric tonne
Size:	Minimum 1,000 dmt
Delivery:	Prompt to 1 month
Pricing variable:	Treatment charge (TC) per tonne of zinc contained in concentrate
Payment terms:	Buyer pays seller for the total value of the contained zinc less the TC; value is based on prices published by Shanghai Metal Markets; seller receives prompt payment

China spot lead

Material:	Lead concentrate of Chinese origin grading 50-55% lead and no more than 400 g/t silver with no other payable by-products or penalty elements
Price basis:	Delivered to smelter's gate
Type:	Spot
Currency:	Renminbi
Weight unit:	Metric tonne
Size:	Minimum 1,000 dmt
Delivery:	Prompt to 1 month
Pricing variable:	Treatment charge (TC) per tonne of lead contained in concentrate
Payment terms:	Buyer pays seller for the total value of the contained lead less the TC; value is based on prices published by Shanghai Metal Markets; seller receives prompt payment

Glossary of abbreviations

INCO TERM RULES FOR ANY MODE OR MODES OF TRANSPORT:

EXW – Ex-Works
FCA – Free Carrier
CPT – Carriage Paid To
CIP – Carriage and Insurance Paid To
DAT – Delivered at Terminal
DAP – Delivered at Place
DDP – Delivered Duty Paid

INCO TERM RULES FOR SEA AND INLAND WATERWAY TRANSPORT:

FAS – Free Alongside Ship
FOB – Free On Board
CFR – Cost and Freight
CIF – Cost Insurance and Freight

COUNTRY ABBREVIATIONS USED:

We use ISO 3166 alpha-2 standard country codes