

# Non-ferrous Prices



Methodology and price  
specifications – April 2021

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## Mission statement

Fastmarkets is a leading commodity price reporting agency (PRA) covering the metals, mining, minerals and forest products industries. Our products include Fastmarkets MB, Fastmarkets AMM, Fastmarkets IM, Fastmarkets RISI, Fastmarkets FOEX and Random Lengths. For more than 100 years we have been providing commodities price reporting services for use by market participants in their day-to-day commercial activities. These services include assessments and indices of commodity prices as well as news, research and commentary on the underlying markets.

Our mission is to meet the market's data requirements honestly and independently, acting with integrity and care to ensure that the trust and confidence placed in the reliability of our pricing methodologies is maintained. We do not have a vested interest in the markets on which we report.

## Introduction

Fastmarkets MB is the leading global provider of pricing intelligence for the non-ferrous metal, steel, steelmaking raw materials, industrial minerals, ferrous and non-ferrous scrap markets, producing price assessments since 1913.

Fastmarkets MB reporters are required to abide by a code of conduct and clear pricing procedures during their market reporting and pricing activities. Fastmarkets is completely independent and has no vested commercial interest in any of the markets it prices.

We are the world's largest dedicated metals price reporting team. We have offices in London, New York, Pittsburgh, Shanghai, Hong Kong, Sao Paulo, Melbourne, Singapore, Mumbai, Dnepr, Istanbul and five other US locations.

The aim of this document is to provide a clear overview of Fastmarkets MB's methodology and specifications for the prices it assesses.

If you have any questions, please contact Fastmarkets Editorial Director Alex Harrison at [aharrison@fastmarkets.com](mailto:aharrison@fastmarkets.com).

## Price discovery and methodology

### Methodology rationale

Fastmarkets MB produces independent, fair and representative price assessments and indices of non-ferrous prices on a daily, bi-weekly, weekly or monthly basis.

Fastmarkets MB's rationale is to adopt and develop the price discovery process and methodology described in this guide to produce assessments that are a consistent and representative indicator of value of the market to which they relate for the trading period they cover.

During the price discovery process, the price reporter's goal is to discover at what representative level market participants have concluded business, made offers or received bids over a certain defined trading period – this is generally the period since the conclusion of the previous price quotation (if, for instance, the last price assessment published by Fastmarkets MB was on Friday 2-3pm London time and our next assessment is due on the following Friday at 2-3pm London time, we will accept price data for business conducted and reported to Fastmarkets MB between Friday afternoon and the following Friday morning).

The time period, or window, identified to assess a market (eg, daily, bi-weekly, weekly, monthly) is determined by Fastmarkets MB after considering the number of data points that Fastmarkets MB can reasonably expect to collect on a consistent basis over the selected period to support the price assessment process.

### Data collection criteria

Fastmarkets MB reporters aim to talk to a broad sample of market participants specifically involved in the buying and selling of the non-ferrous product of interest, with a good representation of both sides of the market, including producers and consumers, as well as traders.

Data is collected from market participants directly involved in spot business primarily by telephone but also by email, digital messaging or by direct submission. All input data received is kept confidential and stored on a secure network.

Fastmarkets MB encourages organisations to submit all their pricing data, especially all the concluded transactions.

Depending on market liquidity, Fastmarkets MB reserves the right to also base its prices on bids, offers, deals heard and market participants' estimates or indications of prevailing values.

Fastmarkets MB welcomes organisations to submit transaction data from authorised back-office functions.

### Price specifications and reference units

Fastmarkets MB has clear specifications for all the price points that it covers. All the reference units, such as currency and volume, are in line with the trading conventions used in the recognised non-ferrous metals markets.

Fastmarkets MB's specifications detail the material's characteristics or quality, location, incoterm, payment terms and the minimum volume accepted. These specifications are determined in consultation with market participants and follow industry convention. Reporters ensure that the information they receive matches these specifications.

### Guidelines that control the exercise of judgment by price reporters during the assessment process

To produce the price assessment, greater weighting is generally given to actual concluded transaction data; bids/offers are second in order of importance; followed by data sources' own estimate of the market when they have no business to report. But other considerations might also intervene such as, the trustworthiness of a data source based on past data submissions or their willingness to provide data on a consistent basis.

All Fastmarkets MB price specifications define the minimum lot size accepted. When volume information is available, this is also taken into consideration in the assessment process. For instance, a deal with a bigger volume will typically carry more weight than a smaller-volume transaction. But price reporters will also consider, for instance, normalizing or discarding a price reported for a deal with an abnormally large or small volume.

Since commodity markets differ in liquidity levels at different periods, the methodology does not set any minimum number, or threshold, of transactions to be gathered on which to base the assessment.

## Calculation of averages

Fastmarkets produces independent, fair and representative price assessments and indices for ferrous, non-ferrous and scrap metal prices on a daily, bi-weekly, weekly, bi-monthly or monthly basis. Fastmarkets calculates and publishes monthly averages based on these independent, proprietary assessments and indices by using simple averages.

The simple monthly averages are calculated by dividing the sum of the price quotations by the number of quotations published during the calendar month. For assessments, Fastmarkets derives both the monthly average high price and the Fastmarkets monthly average low price using this method. For indices, a single monthly average price point is calculated.

For example, there were five weekly price quotations for Chrome Ore South Africa UG2 concentrates index basis 42% cif China, \$ per tonne during the month of June 2018. Prices were published each Friday from June 1, 2018, with the assessments reading \$206 per tonne, \$208 per tonne, \$210 per tonne, \$211 per tonne and \$208 per tonne during the period. The simple monthly average is calculated by taking the sum of the five assessments and dividing that by the number of total assessments over the period - in this case, five. The simple monthly average for June 2018 was \$208.60 per tonne.

Most prices produced from the Americas prior to 2021 were calculated on a rolling-average basis. Rolling monthly averages were calculated by dividing the sum of the daily price quotations - including prices republished on non-assessment days - by the number of quotations published during the calendar month. Please contact [pricing@fastmarkets.com](mailto:pricing@fastmarkets.com), adding the subject heading 'Re: calculation of averages' for more information about Fastmarkets existing or legacy averages.

## Third-party price data

Fastmarkets also publishes prices from external sources including:

Exchange prices – London Metal Exchange, Comex and the Shanghai Futures Exchange

For contract specifications and pricing information on these prices please refer to the individual company/ website.

## Fastmarkets MB indices

Fastmarkets MB's prices also include the following non-ferrous indices:

- Fastmarkets MB Alumina Index
- Fastmarkets MB Manganese Ore Indices
- Fastmarkets MB Copper Concentrates Index
- Fastmarkets MB Lithium Carbonate Index
- Fastmarkets MB Chrome Ore Index

The [methodologies are available on the Fastmarkets website](#).

## Base metals

# Alumina

### CHINA

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**MB-ALU-0001 Alumina metallurgical grade, exw China, yuan/tonne**

Quality:	Metallurgical-grade alumina
Quantity:	Min 1,000 tonnes
Location:	Ex-works China
Unit:	RMB/tonne
Payment terms:	Cash, within one week
Publication:	Weekly. Thursday 2-3pm London

### AUSTRALIA

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**MB-ALU-0002 Alumina index, fob Australia, \$/tonne**

Quality:	Smelter-grade alumina, minimum purity of 98.5% Al <sub>2</sub> O <sub>3</sub>
Quantity:	5,000 tonnes
Location:	fob Bunbury/Kwinana, Australia (other Pacific origins normalized)
Timing:	Within 2 months
Unit:	US\$ per dry metric tonne (dmt)
Payment Terms:	30 days after loading
Publication:	Daily at 4pm London time
Notes:	Bulk carrier. Data history from Augusts 2010. Full methodology available <a href="#">here</a> :

### BRAZIL

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**MB-ALU-0003 Alumina index adjustment to fob Australia index, Brazil, \$/dmt**

Quality:	Smelter-grade alumina, minimum purity of 98.5% Al <sub>2</sub> O <sub>3</sub>
Quantity:	Min 5,000 tonnes
Location:	fob Vila do Conde, Brazil (other Pacific origins normalized)
Timing:	Within two months
Unit:	US\$ per dry metric tonne (dmt)
Payment terms:	30 days after loading
Publication:	Once every two weeks. Thursday 4pm London time
Notes:	Bulk carrier

**MB-ALU-0010 Alumina index inferred, fob Brazil, \$/dmt**

Quality:	Smelter grade alumina, minimum purity of 98.5% Al <sub>2</sub> O <sub>3</sub>
Quantity:	5,000 tonnes
Location:	fob Vila do Conde, Brazil (other ports normalized)
Timing:	Within 2 months
Unit:	USD/dry metric tonne
Payment terms:	30 days after loading
Publication:	Daily 4pm London time
Notes:	Bulk carrier. Full methodology available <a href="#">here</a> :

## Bauxite

Please see **Ores** section.

# Aluminium P1020A

### JAPAN

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**MB-AL-0001 Aluminium P1020A (MJP) quarterly premium, cif Japan, \$/tonne**

Quality:	P1020A or 99.7 % Minimum Al purity (Si 0.10% max, Fe 0.20% max). Ingot, T-bar, sow
Quantity:	500 tonnes
Location:	cif main Japanese ports (Yokohama, Nagoya and Osaka), premium on top of LME cash prices
Timing:	Within the quarter
Unit:	USD/tonne
Payment terms:	Cash against documents (2 days after Bill of lading date)
Publication:	Quarterly
Notes:	<a href="#">Full methodology available here</a>

**MB-AL-0343 Aluminium P1020A (MJP) spot premium, cif Japan, \$/tonne**

Quality: P1020A or 99.7 % Minimum Al purity (Si 0.10% max, Fe 0.20% max) in line with LME specifications. Ingot, T-bar, sow

Quantity: Min 100 tonnes

Location: cif in main Japanese ports at Yokohama, Nagoya and Osaka, premium on top of LME cash prices

Timing: Within 6 weeks

Unit: USD/tonne

Payment terms: Cash against documents (2 days after Bill of lading date)

Publication: Twice weekly. Tuesday and Friday by 4pm London time

Notes: Excluding metal from LME warehouses and metal subject to international sanctions. Assessed by Fastmarkets' Singapore office

## SOUTH KOREA

**MB-AL-0344 Aluminium P1020A premium, cif South Korea, \$/tonne**

Quality: P1020A or 99.7 % Minimum Al purity (Si 0.10% max, Fe 0.20% max). Ingot, T-bar, sow

Quantity: Min 100 tonnes

Location: Cif in main South Korean ports (Gwangyang, Busan or Incheon), premium on top of LME cash prices

Timing: Within 4 weeks

Unit: USD/tonne

Payment terms: Cash against documents (2 days after Bill of lading date)

Publication: Weekly. Tuesday 3-4pm London time

**MB-AL-0307 Aluminium P1020A premium, fca South Korea, \$/tonne**

Quality: P1020A or 99.7 % Minimum Al purity (Si 0.10% max, Fe 0.20% max). Ingot, T-bar, sow

Quantity: Min 100 tonnes

Location: FCA South Korea (Gwangyang, Busan or Incheon), premium on top of LME cash prices

Timing: Within 4 weeks

Unit: USD/tonne

Payment terms: Cash against documents (2 days after Bill of lading date)

Publication: Weekly. Tuesday 3-4pm London time

## CHINA

**MB-AL-0345 Aluminium P1020A premium, cif Shanghai, \$/tonne**

Quality: P1020A or 99.7 % Minimum Al purity (Si 0.10% max, Fe 0.20% max). Ingot

Quantity: Min 100 tonnes

Location: cif Shanghai, premium on top of LME cash prices

Unit: USD/tonne

Timing: Within 4 weeks

Payment terms: Letter of Credit or Telegraphic Transfer, other payment terms normalized

Publication: Monthly, last Tuesday of the month 3-4pm London time

**MB-AL-0328 Aluminium P1020A premium, bonded in-whs, Shanghai, \$/tonne**

Quality: P1020A or 99.7 % Minimum Al purity (Si 0.10% max, Fe 0.20% max)

Quantity: 100 tonnes

Location: In-bonded warehouse in Shanghai, premium on top of LME cash prices

Unit: USD/tonne

Timing: Within 4 weeks

Form: Ingot

Payment terms: Letter of Credit or Telegraphic Transfer, other payment terms normalized

Publication: Monthly, last Tuesday of the month 3-4pm London time

## TAIWAN

**MB-AL-0329 Aluminium P1020A premium, cif Taiwan, \$/tonne**

Quality: P1020A or 99.7 % Minimum Al purity (Si 0.10% max, Fe 0.20% max). Ingot

Quantity: Min 100 tonnes

Location: Cif main Taiwanese ports (Taipei, Kaohsiung or Keelung), premium on top of LME cash prices

Unit: USD/tonne

Payment terms: Letter of Credit or Telegraphic Transfer, other payment terms normalized

Publication: Once every two weeks. Tuesday 3-4pm London time

### SOUTHEAST ASIA & EAST ASIA

**MB-AL-0333 Aluminium P1020A warrant premium, in-whs Southeast Asia, \$/tonne**

Quality: P1020A or 99.7 % Minimum Al purity (Si 0.10% max, Fe 0.20% max). Ingot, T-bar, sow

Quantity: Min 25 tonnes

Location: In any LME-approved warehouse in Singapore and in Malaysia (Johor, Port Klang), premium on top of LME cash prices

Timing: Prompt release

Unit: USD/tonne other terms normalized

Payment terms: Cash against documents (7 days after bill of lading date);

Publication: Weekly. Weds 3-4pm London time

**MB-AL-0334 Aluminium P1020A, warrant premium, in-whs East Asia, \$/tonne**

Quality: P1020A or 99.7 % Minimum Al purity (Si 0.10% max, Fe 0.20% max). Ingot, T-bar, sow

Quantity: Min 25 tonnes

Location: In any LME-approved warehouse in Taiwan (Kaohsiung) and South Korea (Gwangyang, Busan or Incheon), premium on top of LME cash prices

Timing: Prompt release

Unit: USD/tonne

Payment terms: Cash against documents (7 days after bill of lading date); other terms normalized

Publication: Weekly. Wednesday 3-4pm London time

### EUROPE

**MB-AL-0346 Aluminium P1020A premium, in-whs dup Rotterdam, \$/tonne**

Quality: P1020A or 99.7 % Minimum Al purity (Si 0.10% max, Fe 0.20% max). Ingot

Quantity: Min 100 tonnes

Location: In-warehouse Rotterdam duty-unpaid, premium on top of LME cash prices

Unit: USD/tonne

Timing: Within 4 weeks

Payment terms: Cash against documents (7 days after bill of lading date); other terms normalized

Publication: Daily.4pm London time

**MB-AL-0004 Aluminium P1020A premium, in-whs dp Rotterdam, \$/tonne**

Quality: P1020A or 99.7 % Minimum Al purity (Si 0.10% max, Fe 0.20% max). Ingot

Quantity: Min 100 tonnes

Location: In-warehouse Rotterdam duty-paid, premium on top of LME cash prices

Unit: USD/tonne

Timing: Within 4 weeks

Payment terms: Cash against documents (7 days after bill of lading date); other terms normalized

Publication: Twice weekly. Tuesday and Friday 4pm London

**MB-AL-0316 Aluminium P1020A premium, fca dp Italy, \$/tonne**

Quality: P1020A or 99.7 % Minimum Al purity (Si 0.10% max, Fe 0.20% max). Ingot

Quantity: Min 100 tonnes

Location: Free-carrier duty-paid Italy (north and south of country), premium on top of LME cash prices

Timing: Within 4 weeks

Unit: USD/tonne

Payment terms: Cash against documents (7 days after bill of lading date); other terms normalized

Publication: Weekly. Tuesday 3-4pm London time

**MB-AL-0319 Aluminium P1020A premium, fca dp Spain, \$/tonne**

Quality: P1020A or 99.7 % Minimum Al purity (Si 0.10% max, Fe 0.20% max). Ingot

Quantity: Min 100 tonnes

Location: free-carrier duty-paid Spain, premium on top of LME cash prices

Timing: Within 4 weeks

Unit: USD/tonne

Payment terms: Cash against documents (7 days after bill of lading date); other terms normalized

Publication: Once every two weeks. Tuesday 3-4pm London time



### TURKEY

<b>MB-AL-0337</b>	<b>Aluminium P1020A premium, cif dup Turkey, \$/tonne</b>
Quality:	P1020A or 99.7 % Minimum Al purity (Si 0.10% max, Fe 0.20% max). Ingot
Quantity:	Min 100 tonnes
Location:	CIF duty-unpaid Turkey (Marmara region), premium on top of LME cash prices
Timing:	Within 4 weeks
Unit:	USD/tonne
Payment terms:	Cash against documents (7 days after bill of lading date); other terms normalized
Publication:	Once every two weeks. Tuesday, 3-4pm London time

### UNITED STATES

<b>MB-AL-0338</b>	<b>Aluminium P1020A warrant premium, in-whs US, \$/tonne</b>
Quality:	P1020A or 99.7 % Minimum Al purity (Si 0.10% max, Fe 0.20% max). Ingot, T-bar, sow
Quantity:	Min 25 tonnes
Location:	In any LME-approved warehouse in the USA (10 delivery points in June 2017), premium on top of LME cash prices
Timing:	Prompt Release
Unit:	USD per tonne
Payment terms:	Cash against documents (7 days after bill of lading date); other terms normalized
Publication:	Weekly. Wednesday 3-4pm London time

<b>MB-AL-0232</b>	<b>Aluminium P1020A premium, ddp Midwest US, cents/lb</b>
Quality:	LME specification, P1020A or 99.7% minimum Al purity (silicon 0.10% max, iron 0.20% max, zinc 0.03%, gallium 0.04%, vanadium 0.03%). Ingot, T-bar, Sow.
Quantity:	Min 100 tonnes
Location:	Delivered consumer works Midwest
Unit:	US cents per pound
Timing:	Within four weeks
Payment terms:	30 days, other payment terms normalized
Publication:	Twice weekly. Tuesday and Friday 3-4pm London time

<b>MB-AL-0355</b>	<b>Aluminium P1020A premium, cif Baltimore, US cents/lb</b>
Quality:	P1020A or 99.7% minimum aluminium purity (silicon 0.10% maximum, iron 0.20% maximum). Ingot, T-bar, Sow
Quantity:	Min 100 tonnes
Location:	Shipped to ports in Baltimore, Maryland, premium on top of London Metal Exchange cash prices, net back to Baltimore
Timing:	Within four weeks
Unit:	US cents per lb
Payment terms:	30 days, other payment terms normalized
Publication:	Weekly. Tuesday 3-4pm London time

### BRAZIL

<b>MB-AL-0022</b>	<b>Aluminium P1020A premium, cif dup Brazilian main ports, \$/tonne</b>
Quality:	P1020A or 99.7 % Minimum Al purity (Si 0.10% max, Fe 0.20% max). Ingot, T-bar, sow
Quantity:	Min 100 tonnes
Location:	cif Brazil ports duty unpaid, excluding VAT, premium on top of LME cash prices
Timing:	Within 30-60 days
Unit:	USD/tonne
Payment terms:	Cash against documents (7 days after bill of lading date), other payment terms normalized
Publication:	Once every two weeks. Tuesday 3-4pm London
Notes:	All origins except China

<b>MB-AL-0021</b>	<b>Aluminium P1020A premium, delivered Sao Paulo region, \$/tonne</b>
Quality:	P1020A or 99.7 % Minimum Al purity (Si 0.10% max, Fe 0.20% max). Ingot
Quantity:	Min 100 tonnes
Location:	Delivered in São Paulo region duty-paid, VAT not included, premium on top of LME cash prices
Timing:	Within 4 weeks
Unit:	USD/tonne
Payment terms:	Cash against documents (7 days after bill of lading date); other payment terms normalized
Publication:	Once every two weeks. Tuesday 3-4pm London

# Aluminium billet

## EUROPE

**MB-AL-0002 Aluminium 6063 extrusion billet premium, in-whs dp Rotterdam, \$/tonne**

Quality: Aluminium Assn specification AA6063: Si 0.2-0.6% max, Mg 0.45-0.9% max, Fe 0.35% max, Cu 0.1% max, Cr 0.1% max, Zn 0.1% max, Ti 0.1% max, Others each 0.05% max, total 0.15% max. Extrusion billet with outside diameter of 6", 7" and 8"

Quantity: Min 100 tonnes

Location: In-warehouse Rotterdam duty-paid premium on top of LME cash prices

Timing: Within 2 months

Unit: USD/tonne

Payment terms: Cash against documents (7 days after bill of lading date)

Publication: Weekly. Friday 3-4pm London time

**MB-AL-0302 Aluminium 6063 extrusion billet premium, ddp North Germany (Ruhr region), \$/tonne**

Quality: Extrusion billet AA6063: Si 0.2-0.6% max, Mg 0.45-0.9% max, Fe 0.35% max, Cu 0.1% max, Cr 0.1% max, Zn 0.1% max, Ti 0.1% max, others each 0.05% max, total 0.15% max. Billet with diameter of 6", 7" and 8"

Quantity: Min 100 tonnes

Location: Delivered in North Germany (Ruhr region) duty-paid premium on top of LME cash price

Timing: Within 2 months

Unit: USD/tonne

Payment terms: 30-day payment terms, other payment terms normalized

Publication: Weekly. Friday 3-4pm London time

**MB-AL-0299**

Quality: Extrusion billet AA6063. Billet with diameter of 6", 7" and 8"

Quantity: Min 100 tonnes

Location: Delivered in Spain (Bilbao region), duty-paid premium on top of LME cash prices

Timing: Within 2 months

Unit: USD/tonne

Payment terms: 60-day payment, other payments terms normalized

Publication: Once every two weeks. Friday 3-4pm London time

**MB-AL-0300**
**Aluminium 6063 extrusion billet premium, ddp Italy (Brescia region), \$/tonne**

Quality: Extrusion billet AA6063. Billet with diameter of 6", 7" and 8"

Quantity: 25 tonnes

Location: Delivered in Italy (Brescia region) duty-paid premium on top of LME cash prices

Timing: Within 2 months

Unit: USD/tonne

Payment terms: 60-day payment, other payments terms normalized

Publication: Weekly. Friday 3-4pm London time

## UNITED STATES

**MB-AL-0052**
**Aluminum 6063 extrusion billet premium, delivered Midwest US, US cents/lb**

Quality: Extrusion billet AA6063. Billet with diameter of 6", 7" and 8"

Quantity: Min 100 tonnes

Location: Delivered into US Midwest region, duty-unpaid premium on top of the P1020A ingot Midwest premium and LME cash prices

Timing: Within 2 months

Unit: US cents/lb

Payment terms: 30-day payment, other payments terms normalized

Publication: Once every two weeks. Friday 3-4pm London time

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**SOUTHEAST ASIA**

<b>MB-AL-0297</b>	<b>Aluminium 6063 extrusion billet premium, cif Thailand, \$/tonne</b>
Quality:	Extrusion billet AA6063. Billet with diameter of 6", 7" and 8"
Quantity:	100 tonnes
Location:	Cif delivery into main Thai ports, duty-paid premium on top of LME cash prices.
Timing:	Within 2 months
Unit:	USD/tonne
Payment terms:	Cash against documents (7 days after bill of lading date), other payments terms normalized
Publication:	Every 28 days. Friday 3-4pm London time

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**JAPAN**

<b>MB-AL-0298</b>	<b>Aluminium 6063 extrusion quarterly billet premium, cif MJP, \$/tonne</b>
Quality:	Extrusion billet AA6063. Billet with diameter of 6", 7" and 8"
Quantity:	Min 100 tonnes
Location:	cif in Major Japanese Ports (MJP), duty-paid premium on top of the P1020A ingot MJP premium and LME cash prices
Timing:	Within 2 months
Unit:	USD/tonne
Payment terms:	Cash against documents (7 days after bill of lading date), other payments terms normalized
Publication:	Quarterly on the third Friday of the first month of the quarter. 3-4pm London time

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**TURKEY**

<b>MB-AL-0296</b>	<b>Aluminium 6063 extrusion billet premium, cif Turkey (Marmara region), \$/tonne</b>
Quality:	Extrusion billet AA6063. Billet with diameter of 6", 7" and 8"
Quantity:	100 tonnes
Location:	cif Turkey (Marmara region), duty-paid premium on top of LME cash prices
Timing:	Within 2 months
Unit:	USD/tonne
Payment terms:	Cash, other payments terms normalized
Publication:	Once every two weeks. Friday 3-4pm London time

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**BRAZIL**

<b>MB-AL-0287</b>	<b>Aluminium 6063 &amp; 6060 extrusion billet premium, cif Brazilian main ports, \$/tonne</b>
Quality:	Extrusion billet AA6063 and AA6060. Billet with diameter of 6", 7" and 8"
Quantity:	100 tonnes
Location:	cif Brazil
Timing:	Within 2 months
Unit:	USD/tonne
Payment terms:	Cash against documents (7 days after bill of lading date), other payments terms normalized
Publication:	Once every two weeks. Friday 3-4pm London time

# Aluminium foundry alloys

## EUROPE

### **MB-AL-0339 Aluminium foundry alloy silicon 7 ingot premium, ddp Germany, \$/tonne**

Quality: Primary Foundry Alloy silicon 7  
 AlSi7Mg0.3-0.6 for wheel production.  
 Ingot

Quantity: 100 tonnes

Location: Delivered in Germany, duty paid premium on top of LME cash prices

Timing: Within 2 months

Unit: USD/tonne

Payment terms: 30-day payment terms, other payments terms normalized

Publication: Monthly. 2nd Friday of the month between 3pm and 4pm London time

### **MB-AL-0340 Aluminium primary foundry alloy silicon 7 ingot premium, ddp Eastern Europe, \$/tonne**

Quality: Primary Foundry Alloy silicon 7  
 AlSi7Mg0.3-0.6 for wheel production.  
 Ingot

Quantity: Min 100 tonnes

Location: Delivered in Eastern Europe (Poland, Slovakia, Austria, Hungary, Czech Republic), duty-paid premium on top of LME cash prices

Timing: Within 2 months

Unit: USD/tonne

Payment terms: 30-day payment terms, other payments terms normalized

Publication: Monthly. Second Friday of the month between 3pm and 4pm London time

## TURKEY

### **MB-AL-0341 Aluminium primary foundry alloy silicon 7 ingot premium, cif dup over P1020A Turkey, \$/tonne**

Quality: Primary Foundry Alloy silicon 7  
 AlSi7Mg0.3-0.6 for wheel production.  
 Ingot

Quantity: 100 tonnes

Location: Cif in Turkey (Marmara region), duty-unpaid premium on top of P1020A ingot premium and LME cash prices

Timing: Within 2 months

Unit: USD/tonne

Payment terms: Cash, other terms normalized

Publication: Monthly. 2nd Friday of the month between 3pm and 4pm London time

## EAST ASIA

### **MB-AL-0348 Aluminium primary foundry alloy silicon 7 ingot annual premium, cif main South Korean ports, \$/tonne**

Quantity: Min 500 tonnes

Quality: Primary Foundry Alloy silicon 7  
 A356.2 for wheel production

Location: cif in main South Korean ports at Busan, Gwangyang and Incheon, duty-unpaid premium on top of P1020 ingot premium and LME cash prices

Timing: Within 4 weeks

Unit: USD per tonne

Payment terms: Letter of Credit or Telegraphic Transfer, other payments terms normalized

Publication: Annual. After deals for long-term contracts completed between major South Korean buyers and international producers and traders with negotiations starting in October through to December

**MB-AL-0349**     **Aluminium primary foundry alloy silicon 7 ingot annual premium, cif MJP, \$/tonne**

Quality:            Primary Foundry Alloy silicon 7 A356.2 for wheel production

Quantity:            Min 500 tonnes

Location:            cif in main Japanese ports at Yokohama, Nagoya and Osaka, duty-unpaid premium on top of P1020 ingot premium and LME cash prices

Timing:              Within 4 weeks

Unit:                  USD per tonne

Payment terms:     Letter of Credit or Telegraphic Transfer, other payments terms normalized

Publication:        Annual. After deals for long-term contracts are completed between major Japanese buyers and international producers and traders with negotiations starting in October through to December

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**UNITED STATES**

**MB-AL-0342**     **Aluminium primary foundry alloy silicon 7 ingot/T-bar premium dlvd dup over P1020A Midwest US, US cents/lb**

Quality:            Primary Foundry Alloy silicon 7 A356.2 for wheel production. Ingot or T-bar

Quantity:            Min 100 tonnes

Location:            Delivered in US Midwest region, duty-unpaid premium on top of P1020A ingot Midwest premium and LME cash prices

Timing:              Within 2 months

Unit:                  US cents /lb

Payment terms:     7-30 day payment, other terms normalized

Publication:        Monthly. Second Friday of the month, 3-4pm London time

## Low-carbon aluminium differentials

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**EUROPE**

**MB-AL-0381**     **Aluminium low-carbon differential P1020A, Europe, \$/tonne**

Carbon limit:        4tCO<sub>2</sub>e per tonne of aluminium produced, Scope 1 and 2 emissions

Quality:              P1020A or 99.7% minimum Al purity (Si 0.10% max, Fe 0.20% max). Ingot

Quantity:            Min 100 tonnes

Location:            Europe

Unit:                  USD/tonne

Timing:              Within three months

Publication:        Monthly, first Friday of the month, 4pm London

**MB-AL-0382**     **Aluminium low-carbon differential value added product, Europe, \$/tonne**

Carbon limit:        4tCO<sub>2</sub>e per tonne of aluminium produced, Scope 1 and 2 emissions.

Type:                 Extrusion billet, primary foundry alloy, wire rod, slab

Quantity:            Min 100 tonnes

Location:            Europe

Unit:                  USD/tonne

Timing:              Within three months

Publication:        Monthly, first Friday of the month, 4pm London

## Copper concentrate

### ASIA PACIFIC

**MB-CU-0287** **Copper concentrates TC index, cif Asia Pacific, \$/dmTU**

Quality: Concentrate. Copper content 26%; Au 1.1g/dmt; Ag 75g/dmt; S 32%; Fe 28%; Pb 0.07%; Zn 1%; As 0.17%; Sb 0.018%; Hg 2.5ppm; Bi 145ppm

Quantity: Min 5,000 tonnes

Location: cif Asia Pacific

Unit: USD/tonne

Timing: Within 13 weeks

Payment terms: Letter of credit, quotation period M+3

Publication: Weekly. Friday at 4pm London time

Notes: Full methodology available [here](#).

**MB-CU-0288** **Copper concentrates RC index, cif Asia Pacific, \$/dmTU**

Quality: Concentrate. Copper content 26%; Au 1.1g/dmt; Ag 75g/dmt; S 32%; Fe 28%; Pb 0.07%; Zn 1%; As 0.17%; Sb 0.018%; Hg 2.5ppm; Bi 145ppm

Quantity: Min 5,000 tonnes

Location: cif Asia Pacific

Unit: US cents/lb

Timing: Within 13 weeks

Payment terms: Letter of credit, quotation period M+3

Publication: Weekly. Friday at 4pm London time

Notes: Full methodology available [here](#).

## Blister copper

### CHINA

**MB-CU-0408** **Copper blister 98-99% RC spot, cif China, \$/tonne**

Quality: Blister copper of 98-99% copper content, with varying payables

Location: CIF China

Timing: Within 2 months

Unit: USD per tonne

Publication: Monthly. Last day of the month, 3-4pm London time

**MB-CU-0409**
**Copper blister 98-99% RC annual benchmark, cif China, \$/tonne**

Quality: Blister copper of 98-99% copper content, with varying payables

Location: CIF China

Unit: USD per tonne

Publication: Annually. January or February

## Refined copper

### CHINA

**MB-CU-0405** **Copper grade A cathode premium, in-whs Shanghai, \$/tonne**

Quality: Grade A cathode 99.9935% min copper conforming to LME specifications BS EN 1978:1998 – Cu-CATH-1

Quantity: Min 25 tonnes

Location: In-warehouse Shanghai port, duty-unpaid premium on top of LME cash prices

Timing: Within 6 weeks

Unit: USD/tonne

Payment terms: Letter of credit, telegraphic transfer or documents against payment, other payment terms normalized

Publication: Daily. 3-4pm London time

**MB-CU-0383** **Copper grade A cathode ER premium, bonded in-whs Shanghai, \$/tonne**

Quality: Electro-Refined Grade A cathode 99.9935% min conforming to LME specifications BS EN 1978:1998 (Cu-CATH-1).

Quantity: Min 25 tonnes

Location: In-warehouse Shanghai port, duty-unpaid premium on top of LME cash prices

Timing: Within 6 weeks

Unit: USD/tonne

Payment terms: Letter of credit, telegraphic transfer or documents against payment, other payment terms normalized

Publication: Daily. 3-4pm London time

**MB-CU-0382**     **Copper grade A cathode SX-EW premium, bonded in-whs Shanghai, \$/tonne**

Quality: Solvent Extraction-Electro winning Grade A cathode 99.9935% min conforming to LME specifications BS EN 1978:1998 (Cu-CATH-1)

Quantity: 25 tonnes

Location: In-warehouse Shanghai port, duty-unpaid premium on top of LME cash prices

Timing: Within 6 weeks

Unit: USD/tonne

Payment terms: Letter of credit, telegraphic transfer or documents against payment, other payment terms normalized

Publication: Daily. 3-4pm London time

**MB-CU-0403**     **Copper grade A cathode premium, cif Shanghai, \$/tonne**

Quality: Grade A cathode 99.9935% min copper conforming to LME specifications BS EN 1978:1998 – Cu CATH-1

Quantity: Min 25 tonnes

Location: CIF Shanghai port, duty-unpaid premium on top of LME cash prices

Timing: Within 6 weeks

Unit: USD/tonne

Payment terms: Letter of credit, telegraphic transfer or documents against payment, other payment terms normalized

Publication: Daily. 3-4pm London time

Notes: Full methodology available [here](#):

**MB-CU-0380**     **Copper grade A cathode ER premium, cif Shanghai, \$/tonne**

Quality: Electro-Refined Grade A 99.9935% min conforming to LME specifications BS EN 1978:1998 (Cu-CATH-1)

Quantity: Min 25 tonnes

Location: CIF Shanghai port, duty-unpaid premium on top of LME cash prices

Timing: Within 6 weeks

Unit: USD/tonne

Payment terms: Letter of credit, telegraphic transfer or documents against payment, other payment terms normalized

Publication: Daily. 3-4pm London time

**MB-CU-0384**     **Copper grade A cathode SX-EW premium, cif Shanghai, \$/tonne**

Quality: Solvent Extraction-Electro winning Grade A cathode 99.9935% min conforming to LME specifications BS EN 1978:1998 (Cu-CATH-1)

Quantity: Min 25 tonnes

Location: cif Shanghai port, duty-unpaid premium on top of LME cash prices

Timing: Within 6 weeks

Unit: USD/tonne

Payment terms: LC, TT or documents against payment, other terms normalized

Publication: Daily. 3-4pm London time

**MB-CU-0412**     **Copper EQ cathode premium, cif Shanghai, \$/tonne**

Quality: 99.9935% min copper conforming to LME specifications; Ag: 0.0025% max, As: 0.0005% max, Bi: 0.00020% max, Fe: 0.0010% max, Pb: 0.0005% max, S: 0.0015% max, Se: 0.00020% max, Te: 0.00020% max

Quantity: Min 25 tonnes

Location: cif Shanghai

Timing: Within 6 weeks

Unit: USD per tonne

Payment terms: LC, TT or DP other payments normalized to cash

Publication: Once every two weeks. Tuesday 4pm London time

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### SOUTHEAST ASIA & EAST ASIA

**MB-CU-0399**     **Copper grade A cathode premium, cif Southeast Asia, \$/tonne**

Quality: Grade A 99.9935% min copper cathode conforming to LME specifications BS EN 1978:1998 – Cu-CATH-1

Quantity: Min 25 tonnes

Location: cif ports of Vietnam (Ho Chi Minh/Haiphong), Thailand (Bangkok, Laem Chabang), Malaysia (Johor, Port Klang), Indonesia (Jakarta), duty-unpaid premium on top of LME cash prices

Timing: Within 6 weeks

Unit: USD/tonne

Payment terms: Letter of credit, telegraphic transfer or documents against payment, other payment terms normalized

Publication: Weekly. Tuesday 3-4pm London time

**MB-CU-0386 Copper grade A cathode premium, cif Taiwan, \$/tonne**

Quality: Grade A 99.9935% min copper cathode conforming to LME specifications BS EN 1978:1998 – Cu-CATH-1

Quantity: Min 25 tonnes

Location: cif delivery in Taiwanese ports, duty-unpaid premium on top of LME cash prices

Timing: Within 6 weeks

Unit: USD/tonne

Payment terms: Letter of credit, telegraphic transfer or documents against payment, other payment terms normalized

Publication: Once every two weeks. Tuesday 3-4pm London time

**MB-CU-0404 Copper grade A cathode premium, cif South Korea, \$/tonne**

Quality: Grade A cathode 99.9935% min copper conforming to LME specifications BS EN 1978:1998 – Cu-CATH-1

Quantity: Min 25 tonnes

Location: Cif delivery in main South Korean ports (Busan, Incheon, Gwangyang, Onsan), duty-unpaid premium on top of LME cash prices

Timing: Within 6 weeks

Unit: USD/tonne

Payment terms: Letter of credit or telegraphic transfer, other payment terms normalized

Publication: Weekly. Tuesday 3-4pm London time

Notes: Assessed range and single number

**MB-CU-0397 Copper grade A cathode warrant premium, in-whs Southeast Asia, \$/tonne**

Quality: Grade A 99.9935% min copper cathode conforming to LME specifications BS EN 1978:1998 – Cu-CATH-1

Quantity: Min 25 tonnes

Location: In any LME-approved warehouse in Singapore and in Malaysia (Johor, Port Klang), premium on top of LME cash prices

Timing: Prompt release

Unit: USD/tonne

Payment terms: Cash, other payment terms normalized

Publication: Weekly. Wednesday 3-4pm London time

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**EUROPE**
**MB-CU-0369 Copper grade A cathode premium, cif Rotterdam, \$/tonne**

Quality: Grade A cathode 99.9935% min copper conforming to LME specifications BS EN 1978:1998 – Cu-CATH-1

Quantity: Min 25 tonnes

Location: cif delivery in Rotterdam, duty unpaid premium on top of LME cash prices

Timing: Within 4 weeks

Unit: USD/tonne

Payment terms: Cash, other payment terms normalized

Publication: Weekly. Tuesday 3-4pm London time

**MB-CU-0398 Copper grade A cathode warrant premium, in-whs East Asia \$/tonne**

Quality: Grade A cathode 99.9935% min copper conforming to LME specifications BS EN 1978:1998 – Cu-CATH-1

Quantity: Min 25 tonnes

Location: In any LME-approved warehouse in Taiwan (Kaohsiung) and South Korea (Gwangyang, Busan or Incheon), premium on top of LME cash prices

Timing: Prompt release

Unit: USD/tonne

Payment terms: Cash, other payment terms normalized

Publication: Weekly. Wednesday 3-4pm London time

**MB-CU-0406 Copper grade A cathode premium, cif Leghorn, \$/tonne**

Quality: Grade A cathode 99.9935% min copper conforming to LME specifications BS EN 1978:1998 – Cu-CATH-1

Quantity: 25 tonnes

Location: cif delivery in Leghorn (Italy), duty unpaid premium on top of LME cash prices

Timing: Within 4 weeks

Unit: USD/tonne

Payment terms: Cash, other payment terms normalized

Publication: Once every two weeks. Tuesday 3-4pm London time

Notes: Assessed range and single number



**MB-CU-0372 Copper grade A cathode premium, delivered Germany, \$/tonne**

Quality: Grade A cathode 99.9935% min copper conforming to LME specifications BS EN 1978:1998 – Cu-CATH-1

Quantity: Min 25 tonnes

Location: Delivered consumer works in Germany, duty unpaid premium on top of LME cash prices

Timing: Within 4 weeks

Unit: USD/tonne

Payment terms: Cash, other payment terms normalized

Publication: Once every two weeks. Tuesday 3-4pm London time

**MB-CU-0400 Copper grade A cathode warrant premium, in-whs North Europe, \$/tonne**

Quality: Grade A cathode 99.9935% min copper conforming to LME specifications BS EN 1978:1998 – Cu-CATH-1

Quantity: Min 25 tonnes

Location: In any LME-approved warehouse in North Europe (Belgium, Germany, the Netherlands, Sweden and the UK), premium on top of LME cash prices

Timing: Prompt release

Unit: USD/tonne

Payment terms: Cash, other payment terms normalized

Publication: Weekly. Wednesday 3-4pm London time

**MB-CU-0401 Copper grade A cathode warrant premium, in-whs South Europe, \$/tonne**

Quality: Grade A cathode 99.9935% min copper conforming to LME specifications BS EN 1978:1998 – Cu-CATH-1

Quantity: Min 25 tonnes

Location: In any LME-approved warehouse in South Europe (Spain, Italy), premium on top of LME cash prices

Timing: Prompt release

Unit: USD/tonne

Payment terms: Cash, other payment terms normalized

Publication: Weekly. Wednesday 3-4pm London time

**MB-CU-0411 Copper EQ cathode premium, cif Europe, \$/tonne.**

Quality: 99.9935% min copper conforming to LME specifications; Ag: 0.0025% max, As: 0.0005% max, Bi: 0.00020% max, Fe: 0.0010% max, Pb: 0.0005% max, S: 0.0015% max, Se: 0.00020% max, Te: 0.00020% max

Quantity: Min 25 tonnes

Location: cif Europe

Timing: Within 4 weeks

Unit: USD per tonne

Payment terms: Cash payment, other terms normalized

Publication: Once every two weeks. Tuesday 4pm London time

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**UNITED STATES**
**MB-CU-0002 Copper grade 1 cathode premium, ddp Midwest US, US cents/lb**

Quality: Grade A 99.9935% min copper cathode conforming to LME specifications BS EN 1978:1998 – Cu-CATH-1 or Grade 1 Electrolytic Copper Cathode ASTM B115-00

Quantity: Min 25 tonnes

Location: Delivered consumer works Midwest US

Timing: Within 4 weeks

Unit: USD/lb

Payment: 30 days, other payment terms normalized

Publication: Weekly. Tuesday 3-4pm London time

**MB-CU-0377 Copper grade A cathode warrant premium, in-whs US, \$/tonne**

Location: Any LME-approved warehouse in the US, premium on top of LME cash prices

Quality: Grade A 99.9935% min copper cathode conforming to LME specifications BS EN 1978:1998 – Cu-CATH-1

Unit: USD/tonne

Quantity: 25 tonnes

Payment terms: Cash, other payment terms normalized

Timing: Prompt release

Publication: Weekly. Wednesday 3-4pm London time

## Copper rod

### UNITED STATES

<b>MB-CU-0410</b>	<b>Copper rod premium, ddp MidwestUS, US cents/lb</b>
Quality:	Purity of 99.95-99.99%. Thicknesses of 8 millimeters or 0.3125 inches
Quantity:	Min 25,000 pounds
Location:	Delivered US Midwest
Unit:	US cents per pound
Publication:	Monthly. First Thursday

## Lead concentrate

### CHINA

<b>MB-PB-0104</b>	<b>Lead spot concentrate TC, high silver, cif China, \$/tonne</b>
Quality:	55-65% lead content concentrate, high silver 2-4kg, arsenic below 0.7%, mercury below 0.05%
Quantity:	Min 2,000 tonnes
Location:	Treatment Charge on cif basis delivery to Chinese ports
Timing:	Within 13 weeks
Unit:	USD/tonne
Payment terms:	Letter of Credit, quotation period M+3
Publication:	Monthly. Last Friday of the month, 3-4pm London time

<b>MB-PB-0103</b>	<b>Lead spot concentrate TC, low silver, cif China, \$/tonne</b>
Quality:	55-65% lead content concentrate, low silver below 1kg, arsenic below 0.7%, mercury below 0.05%
Quantity:	2,000 tonnes
Location:	Treatment Charge on cif basis delivery to Chinese ports
Timing:	Within 13 weeks
Unit:	USD/tonne
Payment terms:	Letter of Credit, quotation period M+3
Publication:	Monthly. Last Friday of the month, 3-4pm London time

## Refined lead

### INDIA

<b>MB-PB-0087</b>	<b>Lead 99.97% ingot premium, cif India, \$/tonne</b>
Quality:	Lead ingot 99.97% to 99.99% purity to LME specification BS EN 12659:1999, GB/T 469/2005 or ASTM B29-03 (2009)
Quantity:	Min 25 tonnes
Location:	cif delivery in Nhava Sheva (India), premium on top of LME cash prices
Timing:	Within 5 weeks
Unit:	USD/tonne
Payment terms:	Letter of credit, telegraphic transfer or cash against documents, other terms normalized
Publication:	Once every two weeks. Tuesday 3-4pm London time

<b>MB-PB-0086</b>	<b>Lead 99.99% ingot premium, cif India, \$/tonne</b>
Quality:	Lead ingot of 99.99% minimum purity conforming to LME specification BS EN 12659:1999, GB/T 469/2005 or ASTM B29-03 (2009)
Quantity:	Min 25 tonnes
Location:	cif Nhava Sheva (India), duty-unpaid premium on top of LME cash prices
Timing:	Within 5 weeks
Unit:	USD/tonne
Payment terms:	Letter of credit, telegraphic transfer or cash against documents, other terms normalized
Publication:	Once every two weeks. Tuesday 3-4pm London time

### SOUTHEAST ASIA & EAST ASIA

**MB-PB-0107**      **Lead 99.97% ingot premium, cif Southeast Asia, \$/tonne**

Quality:            Lead ingot of 99.97-99.99% purity conforming to LME specification BS EN 12659:1999, GB/T 469/2005 or ASTM B29-03 (2009)

Quantity:           25 tonnes

Location:           cif to ports of Vietnam (Ho Chi Minh/Haiphong), Thailand (Bangkok, Laem Chabang), Malaysia (Johor, Port Klang), Indonesia (Jakarta), duty-unpaid premium on top of LME cash prices

Timing:              Within 5 weeks

Unit:                   USD/tonne

Payment terms:    Letter of credit, telegraphic transfer or cash against documents, other terms normalized

Publication:        Once every two weeks. Tuesday 3-4pm London time

**MB-PB-0108**      **Lead 99.99% ingot premium, cif Southeast Asia, \$/tonne**

Quality:            Lead ingot of 99.99% min purity to LME specification BS EN 12659:1999, GB/T 469/2005 or ASTM B29-03 (2009)

Quantity:           25 tonnes

Location:           cif ports of Vietnam (Ho Chi Minh/Haiphong), Thailand (Bangkok, Laem Chabang), Malaysia (Johor, Port Klang), Indonesia (Jakarta), duty-unpaid premium on top of LME cash prices

Timing:              Within 5 weeks

Unit:                   USD/tonne

Payment terms:    Letter of credit, telegraphic transfer or cash against documents, other terms normalized

Publication:        Once every two weeks. Tuesday 3-4pm London time

**MB-PB-0084**      **Lead 99.97% ingot premium, cif Taiwan, \$/tonne**

Quality:            Lead of 99.97% to 99.99% purity conforming to LME specification BS EN 12659:1999, GB/T 469/2005 or ASTM B29-03 (2009)

Quantity:           25 tonnes

Location:           cif delivery main Taiwan ports (Taipei, Kaohsiung or Keelung), duty-unpaid premium on top of LME cash prices

Timing:              Within 5 weeks

Unit:                   USD/tonne

Payment terms:    Letter of credit, telegraphic transfer or cash against documents, other terms normalized

Publication:        Once every two weeks. Tuesday 3-4pm London time

**MB-PB-0083**      **Lead 99.99% ingot premium, cif Taiwan, \$/tonne**

Quality:            Lead ingot 99.99% min purity to LME specification BS EN 12659:1999, GB/T 469/2005 or ASTM B29-03 (2009)

Quantity:           25 tonnes

Location:           cif main Taiwanese ports (Taipei, Kaohsiung or Keelung), duty-unpaid premium on top of LME cash prices

Timing:              Within 5 weeks

Unit:                   USD/tonne

Payment terms:    Letter of credit, telegraphic transfer or cash against documents, other terms normalized

Publication:        Once every two weeks. Tuesday 3-4pm London time

**MB-PB-0105**      **Lead min 99.97% ingot warrant premium, in-whs Southeast Asia \$/tonne**

Quality:            Lead ingot of 99.97% to 99.99% purity conforming to LME specification BS EN 12659:1999, GB/T 469/2005 or ASTM B29-03 (2009)

Quantity:           25 tonnes

Location:           In any LME-approved warehouse in Singapore and in Malaysia (Johor, Port Klang), premium on top of LME cash prices

Timing:              Prompt release

Unit:                   USD/tonne

Payment terms:    Cash, other payment terms normalized

Publication:        Weekly. Wednesday 3-4pm London time

**MB-PB-0106**      **Lead min 99.97% ingot warrant premium, in-whs East Asia \$/tonne**

Quality:      Lead ingot of 99.97% to 99.99% purity conforming to LME specification BS EN 12659:1999, GB/T 469/2005 or ASTM B29-03 (2009)

Quantity:      25 tonnes

Location:      In any LME-approved warehouse in Taiwan (Kaohsiung) and South Korea (Gwangyang, Busan or Incheon), premium on top of LME cash prices

Timing:      Prompt release

Unit:      USD/tonne

Payment terms:      Cash, other terms normalized

Publication:      Weekly. Wednesday 3-4pm London time

**MB-PB-0110**      **Lead 99.97% ingot warrant premium, in-whs South Europe, \$/tonne**

Quality:      Lead cathode of 99.97% to 99.99% purity conforming to LME specification BS EN 12659:1999, GB/T 469/2005 or ASTM B29-03 (2009)

Quantity:      Min 25 tonnes

Location:      In any LME-approved warehouse in South Europe (Spain, Italy), premium on top of LME cash prices

Timing:      Prompt release

Unit:      USD/tonne

Payment terms:      Cash, other payment terms normalized

Publication:      Weekly. Wednesday 3-4pm London time

### EUROPE

**MB-PB-0109**      **Lead 99.97% ingot warrant premium, in-whs North Europe, \$/tonne**

Location:      In any LME-approved warehouse in North Europe (Belgium, Germany, the Netherlands, Sweden and the UK), premium on top of LME cash prices

Quality:      Lead of 99.97% to 99.99% purity conforming to LME specification BS EN 12659:1999, GB/T 469/2005 or ASTM B29-03 (2009)

Unit:      USD/tonne

Quantity:      Min 25 tonnes

Payment terms:      Cash, other payment terms normalized

Timing:      Prompt release

Form:      Cathode

Publication:      Weekly. Wednesday 3-4pm London time

### UNITED STATES

**MB-PB-0056**      **Lead 99.97% ingot premium ddp Midwest US, US cents/lb**

Quality:      Lead ingot of 99.97% to 99.99% purity conforming to LME specification BS EN 12659:1999, GB/T 469/2005 or ASTM B29-03 (2009)

Quantity:      Min 25 tonnes

Location:      Delivered consumer works, US Midwest

Timing:      Within 5 weeks

Unit:      US cents/lb

Payment terms:      30 days, other payment terms normalized

Publication:      Weekly. Tuesday 3-4pm London time

**MB-PB-0099**      **Lead 99.99% ingot premium, delivered Midwest US, US cents/lb**

Quality:      Lead ingot of 99.99% minimum purity conforming to LME specification BS EN 12659:1999, GB/T 469/2005 or ASTM B29-03 (2009)

Quantity:      Min 25 tonnes

Location:      Delivered consumer works, US Midwest

Timing:      Within 5 weeks

Unit:      US cents /lb

Payment terms:      30 days, other payment terms normalized

Publication:      Weekly. Tuesday 3-4pm London time

<b>MB-PB-0097</b>	<b>Lead 99.97% ingot warrant premium, in-whs US, \$/tonne</b>
Quality:	Lead cathode of 99.97% to 99.99% purity conforming to LME specification BS EN 12659:1999, GB/T 469/2005 or ASTM B29-03 (2009)
Quantity:	Min 25 tonnes
Location:	In any LME-approved warehouse in the USA, premium on top of LME cash prices
Timing:	Prompt release
Unit:	USD/tonne
Payment terms:	Cash, other payment terms normalized
Publication:	Weekly. Wednesday 3-4pm London time

## Nickel ore

Please see **Ores** section.

## Nickel

### CHINA

<b>MB-NI-0143</b>	<b>Nickel min 99.8% full plate premium, in-whs Shanghai, \$/tonne</b>
Quality:	Full plate. 99.80% min primary nickel conforming to LME specification: ASTM B39-79 (2013) or GB/T 6516-2010 - Ni9990 grade
Quantity:	Min 10 tonnes (under consultation to increase to 60 tonnes)
Location:	In-warehouse iShanghai bonded zone, premium on top of LME cash prices
Timing:	With 2 weeks
Unit:	USD/tonne
Payment terms:	Cash against document, Letter of credit, telegraphic transfer, other terms normalized
Publication:	Weekly. Tuesday 3-4pm London time
Notes:	Assessed range and single number

<b>MB-NI-0142</b>	<b>Nickel min 99.8% full plate premium, cif Shanghai, \$/tonne</b>
Type:	Assessed range and single number
Quality:	Full plate. 99.80% min primary nickel conforming to LME specification: ASTM B39-79 (2013) or GB/T 6516-2010 - Ni9990 grade
Quantity:	Min 10 tonnes (under consultation to increase to 60 tonnes)
Location:	cif delivery basis Shanghai port, premium on top of LME cash prices
Timing:	With 6 weeks
Unit:	USD/tonne
Payment terms:	Cash against document, Letter of credit, telegraphic transfer, and other terms normalized
Publication:	Weekly. Tuesday 3-4pm London time

**MB-NI-0245**      **Shanghai, Nickel premium, 99.80% purity, briquette, duty free, cif, \$ per tonne**

Quality: Nickel content 99.8% in line with LME specifications

Quantity: Min 6 tonnes

Location: cif China

Timing: Within 8 weeks

Unit: USD/tonne

Payment terms: Letter of credit and telegraphic transfer

Publication: Last Tuesday of each month

Notes: Origin = Australia and Madagascar

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### SOUTHEAST ASIA & EAST ASIA

**MB-NI-0137**      **Nickel min 99.8% full plate warrant premium, in-whs Southeast Asia, \$/tonne**

Quality: Full-plate cathode. 99.80% min primary nickel conforming to LME specification: ASTM B39-79 (2013) or GB/T 6516-2010 – Ni9990 grade

Quantity: 6 tonnes

Location: Any LME-approved warehouse in Singapore and Malaysia (Johor, Port Klang), premium on top of LME cash prices

Timing: Prompt release

Unit: USD/tonne

Payment terms: Cash, other terms normalized

Publication: Weekly. Wednesday 3-4pm London time

**MB-NI-0138**      **Nickel min 99.8% briquette warrant premium, in-whs Southeast Asia, \$/tonne**

Quality: Briquette. 99.80% min primary nickel conforming to LME specification: ASTM B39-79 (2013) or GB/T 6516-2010 – Ni9990 grade

Quantity: 6 tonnes

Location: Any LME-approved warehouse in Singapore/Malaysia (Johor, Port Klang), premium on top of LME cash prices

Timing: Prompt release

Unit: USD/tonne

Payment terms: Cash, other terms normalized

Publication: Weekly. Wednesday 3-4pm London time

**MB-NI-0139**      **Nickel min 99.8% full plate warrant premium, in-whs East Asia, \$/tonne**

Quality: Full-plate cathode. 99.80% min primary nickel conforming to LME specification: ASTM B39-79 (2013) or GB/T 6516-2010 - Ni9990 grade

Quantity: 6 tonnes

Location: In any LME-approved warehouse in Taiwan (Kaohsiung) and South Korea (Gwangyang, Busan or Incheon), premium on top of LME cash prices

Timing: Prompt release

Unit: USD/tonne

Payment terms: Cash, other terms normalized

Publication: Weekly. Wednesday 3-4pm London time

**MB-NI-0140**      **Nickel min 99.8% briquette warrant premium, in-whs East Asia, \$/tonne**

Quality: Briquette. 99.80% min primary nickel conforming to LME specification: ASTM B39-79 (2013) or GB/T 6516-2010 - Ni9990 grade

Quantity: 6 tonnes

Location: In any LME-approved warehouse in Taiwan (Kaohsiung) and South Korea (Gwangyang, Busan or Incheon), premium on top of LME cash prices

Timing: Prompt release

Unit: USD/tonne

Payment terms: Cash, other payment terms normalized

Publication: Weekly. Wednesday 3-4pm London time

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### EUROPE

**MB-NI-0003**      **Nickel uncut cathode premium, in-whs Rotterdam, \$/tonne**

Quality: Full-plate cathode. 99.80% min primary nickel conforming to LME specification: ASTM B39-79 (2013) or GB/T 6516-2010 - Ni9990 grade

Quantity: 20 tonnes

Location: In-warehouse Rotterdam, premium on top of LME cash prices

Timing: Within one week

Unit: USD/tonne

Payment terms: Cash, other payment terms normalized

Publication: Weekly. Tuesday 3-4pm London time

**MB-NI-0001 Nickel 4x4 cathode premium, in-whs Rotterdam, \$/tonne**

Quality: 4x4 cut cathode. 99.80% min primary nickel conforming to LME specification: ASTM B39-79 (2013) or GB/T 6516-2010 - Ni9990 grade

Quantity: Min 20 tonnes

Location: In-warehouse Rotterdam, premium on top of LME cash prices

Timing: Within one week

Unit: USD/tonne

Payment terms: Cash, other payment terms normalized

Publication: Weekly. Tuesday 3-4pm London time

**MB-NI-0002 Nickel briquette premium, in-whs Rotterdam, \$/tonne**

Quality: Briquette. 99.80% min primary nickel conforming to LME specification: ASTM B39-79 (2013) or GB/T 6516-2010 - Ni9990 grade

Quantity: 20 tonnes

Location: In-warehouse Rotterdam, premium on top of LME cash prices

Timing: Within one week

Unit: USD/tonne

Payment terms: Cash, other payment terms normalized

Publication: Weekly. Tuesday 3-4pm London time

**MB-NI-0141 Nickel min 99.8% warrant premium, in-whs North Europe, \$/tonne**

Quality: Cathode (full-plate, cut), pellet or briquette. 99.80% min primary nickel conforming to LME specification: ASTM B39-79 (2013) or GB/T 6516-2010 - Ni9990 grade

Quantity: Min 6 tonnes

Location: Any LME-approved warehouse in North Europe (Belgium, Germany, the Netherlands, Sweden and the UK), premium on top of LME cash prices

Timing: Prompt release

Unit: USD/tonne

Payment terms: Cash, other terms normalized

Publication: Weekly. Wednesday 3-4pm London time

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**UNITED STATES**
**MB-NI-0240 Nickel 4x4 cathode premium, delivered Midwest US, US cents/lb**

Quality: 4x4 cut cathode. 99.8% minimum primary nickel conforming to LME specification: ASTM B39-79 (2013) or GB/T 6516-2010 - Ni9990 grade

Quantity: Min 20 tonnes

Location: Delivered consumer works US

Timing: Within four weeks

Unit: US cents per lb

Payment terms: 30 days, other payment terms normalized

Publication: Weekly. Tuesday 3-4pm London time

**MB-NI-0241 Nickel briquette premium, delivered Midwest US, US cents/lb**

Quality: Briquette. 99.8% minimum primary nickel conforming to LME specification: ASTM B39-79 (2013) or GB/T 6516-2010 - Ni9990 grade

Quantity: Min 20 tonnes

Location: Delivered consumer works US

Timing: Within four weeks

Unit: US cents per lb

Payment terms: 30 days, other payment terms normalized

Publication: Weekly. Tuesday 3-4pm London time

# Tin

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**SOUTHEAST ASIA & EAST ASIA**


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<b>MB-SN-0038</b>	<b>Tin 99.9% ingot premium, cif Taiwan, \$/tonne</b>
Quality:	Ingot. 99.9% tin purity conforming to LME specification: BS EN 610:1996 with 100-300 ppm lead content
Quantity:	Min 5 tonnes
Location:	cif delivery basis Taiwanese ports (Taipei, Kaohsiung or Keelung), premium on top of LME cash prices
Timing:	Within 2 weeks
Unit:	USD/tonne
Payment terms:	Cash against document, telegraphic transfer, other terms normalized
Publication:	Once every two weeks. Tuesday 3-4pm London time

<b>MB-SN-0042</b>	<b>Tin min 99.85% ingot warrant premium, in-whs Southeast Asia, \$/tonne</b>
Quality:	Ingot. Minimum 99.85% tin purity conforming to LME specification: BS EN 610:1996, max 500ppm lead
Quantity:	Min 5 tonnes
Location:	In any LME-approved warehouse in Singapore and in Malaysia (Johor, Port Klang), premium on top of LME cash prices
Timing:	Prompt release
Unit:	USD/tonne
Payment terms:	Cash, other payment terms normalized
Publication:	Weekly. Wednesday 3-4pm London time

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**EUROPE**


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<b>MB-SN-0002</b>	<b>Tin 99.9% ingot premium, in-whs Rotterdam, \$ per tonne</b>
Quality:	Ingot. 99.9% tin purity conforming to LME specification: BS EN 610:1996 with 100-300 ppm lead content
Quantity:	Min 20 tonnes
Location:	In-warehouse Rotterdam, premium on top of LME cash prices
Timing:	Within 2 weeks
Unit:	USD/tonne
Payment terms:	Cash against conditional release, other payment terms normalized
Publication:	Weekly. Tuesday 3-4pm London time

<b>MB-SN-0029</b>	<b>Tin 99.9% low lead ingot premium, in-whs Rotterdam, \$/tonne</b>
Quality:	Ingot. 99.9% tin purity conforming to LME specification: BS EN 610:1996 with less than 100 ppm lead content
Quantity:	Min 20 tonnes
Location:	In-warehouse Rotterdam, premium on top of LME cash prices
Timing:	Within 2 weeks
Unit:	USD/tonne
Payment terms:	Cash against conditional release, other payment terms normalized
Publication:	Weekly. Tuesday 3-4pm London time

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**UNITED STATES**


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<b>MB-SN-0012</b>	<b>Tin grade A min 99.85% ingot all-in price, ddp Midwest US, \$/tonne</b>
Quality:	Ingot. Min 99.85% tin purity conforming to LME specification BS EN 610:1996 and ASTM grade A, max 500ppm lead
Quantity:	Min 20 tonnes
Location:	Delivered consumer works US
Timing:	Within 2 weeks
Unit:	USD/tonne
Payment terms:	30 days, other payment terms normalized
Publication:	Daily 3-4pm London time



**MB-SN-0036 Tin 99.85% ingot premium, in-whs Baltimore, \$/tonne**

Quality: Ingot. Min 99.85% tin purity conforming to LME specification: BS EN 610:1996, max 500ppm lead, total impurities must not exceed 0.15%

Quantity: Min 20 tonnes

Location: In-warehouse Baltimore, premium on top of LME cash prices

Unit: USD/tonne

Payment terms: Cash against documents, other payment terms normalized

Publication: Once every two weeks. Tuesday 3-4pm London

**MB-SN-0011 Tin grade A min 99.85% ingot premium, ddp Midwest US, \$/tonne**

Quality: Delivered premium over cost of tin of 99.85% purity (min) conforming to BS EN 610:1996

Quantity: Min 20 tonnes

Location: ddp US Midwest

Timing: Within 2 weeks

Unit: US dollars per tonne

Payment terms: 30-days, other terms normalized

Publication: Once every two weeks. Tuesday 3-4pm London time

## Zinc concentrate

**CHINA**


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**MB-ZN-0110 Zinc spot concentrate TC, cif China, \$/per tonne**

Quality: 45-55% zinc content, low silver (0-170g/t), silica 3.5-4.5%, copper below 3% (high copper 4-5%), lead below 3.5% (total copper, lead, silica at max 6-7%), arsenic below 0.6%, cadmium below 0.33% and mercury below 0.06%

Quantity: Min 2,000 tonnes

Location: cif Chinese ports

Timing: Within 13 weeks

Unit: USD/tonne

Payment terms: Letter of Credit, quotation period M+3

Publication: Monthly. Last Friday of every month.

**MB-ZN-0120 Zinc concentrate TC spot, delivered North China, yuan/tonne**

Quality: Concentrate. Zn 50%, As <0.4%, Hg <100ppm, Si <6%, S >26%, Pb <3%, Fe <8%.

Quantity: Min 100 tonnes

Location: Treatment Charge on delivered basis

Unit: CNY/tonne

Payment terms: Cash against document or prepayment

Publication: Monthly. Last Friday of every month.

**MB-ZN-0121 Zinc concentrate TC spot, delivered South China, yuan/tonne**

Quality: Concentrate. Zn content 50%, As <0.4%, Hg <100ppm, Si <6%, S >26%, Pb <3%, Fe <8%.

Quantity: Min 100 tonnes

Location: Treatment Charge on delivered basis

Unit: CNY/tonne

Payment terms: Cash against document or prepayments

Publication: Monthly. Last Friday of every month.

## Refined zinc

### CHINA

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**MB-ZN-0119 Zinc min 99.995% ingot premium, in-whs Shanghai, \$/tonne**

Quality:	Special High Grade zinc ingot of minimum 99.995% purity, conforming to LME specifications and relevant standards: BS EN 1179:2003, ISO 752:2004 - ZN-1 grade, ASTM B6-12 - LME grade or GB/T 470-2008
Quantity:	Min 25 tonnes
Location:	In-warehouse Shanghai bonded zone, premium on top of LME cash prices
Timing:	Within 4 weeks
Unit:	USD/tonne
Payment terms:	Letter of credit, telegraphic transfer or documents against payment, other payment terms normalized
Publication:	Weekly. Tuesday 3-4pm London time
Notes:	Assessed range and assessed single number

**MB-ZN-0106 Zinc SHG min 99.995% ingot premium, cif Shanghai, \$/per tonne**

Quality:	Special High Grade zinc ingot of minimum 99.995% purity, conforming to LME specifications and relevant standards: BS EN 1179:2003, ISO 752:2004 - ZN-1 grade, ASTM B6-12 - LME grade or GB/T 470-2008
Quantity:	Min 25 tonnes
Location:	cif Shanghai port, premium on top of LME cash prices
Timing:	Within 4 weeks
Unit:	USD/tonne
Payment terms:	Letter of credit, telegraphic transfer or documents against payment, other payment terms normalized
Publication:	Once every two weeks. Tuesday 3-4pm London time

**MB-ZN-0116**
**Zinc SHG 99.995% ingot premium, cif Taiwan \$/tonne**

Quality:	Special High Grade zinc ingot of minimum 99.995% purity, conforming to LME specifications and relevant standards: BS EN 1179:2003, ISO 752:2004 - ZN-1 grade, ASTM B6-12 - LME grade or GB/T 470-2008
Quantity:	Min 25 tonnes
Location:	cif Taiwanese ports, premium on top of LME cash prices
Timing:	Within 4 weeks
Unit:	USD/tonne
Payment terms:	Letter of credit, telegraphic transfer or documents against payment, other payment terms normalized
Publication:	Once every two weeks. Tuesday 3-4pm London time

### SOUTHEAST ASIA & EAST ASIA

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**MB-ZN-0113 Zinc SHG 99.995% ingot premium, fca Singapore, \$/per tonne**

Quality:	Special High Grade zinc ingot of minimum 99.995% purity, conforming to LME specifications and relevant standards: BS EN 1179:2003, ISO 752:2004 - ZN-1 grade, ASTM B6-12 - LME grade or GB/T 470-2008
Quantity:	Min 25 tonnes
Location:	fca Singapore, premium on top of LME cash price
Timing:	Within 4 weeks
Unit:	USD/tonne
Payment terms:	Letter of credit or telegraphic transfer, other terms normalized
Publication:	Once every two weeks. Tuesday 3-4pm London time

**MB-ZN-0115**      **Zinc SHG 99.995% ingot premium, fca Malaysia, \$/per tonne**

Quality: Special High Grade zinc ingot of minimum 99.995% purity, conforming to LME specifications and relevant standards: BS EN 1179:2003, ISO 752:2004 - ZN-1 grade, ASTM B6-12 - LME grade or GB/T 470-2008

Quantity: Min 25 tonnes

Location: fca main Malaysian ports (Johor, Port Klang), premium on top of LME cash price

Timing: Within 4 weeks

Unit: USD/tonne

Payment terms: Letter of credit or telegraphic transfer, other terms normalized

Publication: Once every two weeks. Tuesday 3-4pm London time

**MB-ZN-0093**      **Zinc SHG min 99.995% ingot premium, cif Southeast Asia, \$/tonne**

Quality: Special High Grade zinc ingot of minimum 99.995% purity, conforming to LME specifications and relevant standards: BS EN 1179:2003, ISO 752:2004 - ZN-1 grade, ASTM B6-12 - LME grade or GB/T 470-2008

Quantity: Min 25 tonnes

Location: cif ports in Vietnam (Ho Chi Minh/ Haiphong), Thailand (Bangkok, Laem Chabang), Malaysia (Johor, Port Klang), Indonesia (Jakarta), duty-unpaid premium on top of LME cash prices

Timing: Within 4 weeks

Unit: USD/tonne

Payment terms: Letter of credit or telegraphic transfer, other terms normalized

Publication: Once every two weeks Tuesday 3-4pm London time

**MB-ZN-0123**      **Zinc SHG min 99.995% warrant premium, in-whs Southeast Asia, \$/tonne**

Quality: Special High Grade zinc ingot of minimum 99.995% purity, conforming to LME specifications and relevant standards: BS EN 1179:2003, ISO 752:2004 - ZN-1 grade, ASTM B6-12 - LME grade or GB/T 470-2008

Quantity: Min 100 tonnes

Location: Any LME-approved warehouse in Singapore/Malaysia (Johor, Port Klang), premium on top of LME cash prices

Timing: Prompt release

Unit: USD/tonne

Payment terms: Cash, other payment terms normalized

Publication: Weekly; Wednesday 3-4pm London time

### EUROPE

**MB-ZN-0001**      **Zinc SHG min 99.995% ingot premium, dp fca Rotterdam, \$/tonne**

Quality: Special High Grade zinc ingot of minimum 99.995% purity, conforming to LME specifications and relevant standards: BS EN 1179:2003, ISO 752:2004 - ZN-1 grade, ASTM B6-12 - LME grade or GB/T 470-2008

Quantity: Min 100 tonnes

Location: Free-carrier basis delivery in Rotterdam, duty-paid premium on top of LME cash prices

Timing: Within 4 weeks

Unit: USD/tonne

Payment terms: Cash, other payment terms normalized

Publication: Weekly. Tuesday 3-4pm London time

**MB-ZN-0099**     **Zinc SHG min 99.995% ingot premium, dp fca Antwerp, \$/tonne**

Quality: Special High Grade zinc ingot of minimum 99.995% purity, conforming to LME specifications and relevant standards: BS EN 1179:2003, ISO 752:2004 - ZN-1 grade, ASTM B6-12 - LME grade or GB/T 470-2008

Quantity: Min 100 tonnes

Location: Free-carrier basis delivery in Antwerp, duty-unpaid premium on LME cash prices

Timing: Within 4 weeks

Unit: USD/tonne

Payment terms: Cash, other terms normalized

Publication: Weekly. Tuesday 3-4pm London time

**MB-ZN-0103**     **Zinc SHG min 99.995% ingot premium, fca dp Italy, \$/tonne**

Quality: Special High Grade zinc ingot of minimum 99.995% purity, conforming to LME specifications and relevant standards: BS EN 1179:2003, ISO 752:2004 - ZN-1 grade, ASTM B6-12 - LME grade or GB/T 470-2008

Quantity: Min 100 tonnes

Location: Free-carrier basis delivery in Italy, duty-paid premium on top of LME cash prices

Timing: Within 4 weeks

Unit: USD/tonne

Payment terms: Cash, other terms normalized

Publication: Weekly. Tuesday 3-4pm London time

**MB-ZN-0102**     **Zinc SHG min 99.995% ingot premium, ddp Italy, \$/per tonne**

Quality: Special High Grade zinc ingot of minimum 99.995% purity, conforming to LME specifications and relevant standards: BS EN 1179:2003, ISO 752:2004 - ZN-1 grade, ASTM B6-12 - LME grade or GB/T 470-2008

Quantity: Min 100 tonnes

Location: Delivered duty paid consumer works in Italy, premium on LME cash prices

Timing: Within 4 weeks

Unit: USD/tonne

Payment terms: Cash, other terms normalized

Publication: Weekly. Tuesday 3-4pm London time

**MB-ZN-0117**     **Zinc SHG min 99.995% warrant premium, in-whs North Europe, \$/tonne**

Quality: Special High Grade zinc ingot of minimum 99.995% purity, conforming to LME specifications and relevant standards: BS EN 1179:2003, ISO 752:2004 - ZN-1 grade, ASTM B6-12 - LME grade or GB/T 470-2008

Quantity: Min 100 tonnes

Location: In any LME-approved warehouse in North European locations (Belgium, Germany, the Netherlands, Sweden and the UK), premium on top of LME cash prices

Timing: Prompt release

Unit: USD/tonne

Payment terms: Cash, other payment terms normalized

Publication: Weekly. Wednesday 3-4pm London time

**MB-ZN-0082**     **Zinc SHG min 99.995% ingot premium monthly average, delivered UK, £/tonne**

Quality: Special High Grade zinc ingot of minimum 99.995% purity, conforming to LME specifications and relevant standards: BS EN 1179:2003, ISO 752:2004 - ZN-1 grade, ASTM B6-12 - LME grade or GB/T 470-2008

Quantity: Min 25 tonnes

Location: Delivered customer works basis in the UK; all-in price including average of LME GBP cash settlements for the last ten days of the previous month and assessed term premiums for UK delivery (either delivered customer works or FCA Rotterdam plus transport, warehousing, delivery and financing costs)

Unit: GBP/tonne

Payment terms: Cash, other payment terms normalized

Publication: Monthly. 1st working day of the month between 1pm and 2pm London time

Notes: This partly-assessed single number was launched in 2013 as a replacement to the Thyssenkrupp Metallurgie UK SHG zinc price, which had been discontinued.

## UNITED STATES

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**MB-ZN-0061**      **Zinc SHG min 99.995% ingot all-in price, ddp Midwest US, US cents/lb**

Quality:	Min 99.995% special high grade zinc ingot, conforming to LME specifications and relevant BS EN standards
Quantity:	Min 25 tonnes
Location:	Delivered consumer works Midwest US
Timing:	Within 4 weeks
Unit:	USD/tonne
Payment terms:	30 days, other payment terms normalized
Publication:	Weekly. Tuesday 3-4pm London time

**MB-ZN-0104**      **Zinc SHG min 99.995% warrant premium, in-whs US, \$/per tonne**

Quality:	Special High Grade zinc ingot of minimum 99.995% purity, conforming to LME specifications and relevant standards: BS EN 1179:2003, ISO 752:2004 - ZN-1 grade, ASTM B6-12 - LME grade or GB/T 470-2008
Quantity:	25 tonnes
Location:	In any LME-approved warehouse in the US, premium on top of LME cash prices
Timing:	Prompt release
Unit:	USD/tonne
Payment terms:	Cash, other payment terms normalized
Publication:	Weekly. Wednesday 3-4pm London time

## Bulk alloys

# Ferro-chrome

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**CHINA**
**MB-FEC-0011** **Ferro-chrome 50% Cr import, cif main Chinese ports, \$/lb contained Cr**

Quality: 10-100mm lump. Chrome base 50%, range 48-52%; carbon base 7%, max 9%; silicon base 3%, max 6%; phosphorous max 0.03%; sulphur max 0.06%.

Quantity: Min 1,000 tonnes

Location: cif main Chinese ports

Timing: Within 6 weeks

Unit: USD per lb

Payment terms: LC at sight

Publication: Weekly. Tuesday 3pm London time

Notes: Seaborne, all origins.

Data history from May 2012

**MB-FEC-0005** **Ferro-chrome contract 6-8% C, basis 50% Cr, ddp China, yuan/tonne**

Quality: Lump. Cr 50% min; C 6-8%; Si: 5% max; P 0.04% max; S 0.04% max

Quantity: Min 1,000 tonnes

Location: ddp China

Unit: CNY/tonne, normalized to Cr 50%

Payment terms: Cash, other payment terms normalized

Publication: Weekly. Tuesday between 2pm and 3pm London time

**MB-FEC-0006** **Ferro-chrome spot 6-8% C, basis 50% Cr, ddp China, yuan/tonne**

Quality: Lump. Cr 50% min, C 6-8%, Si 5% max, P 0.04% max, S 0.04% max

Quantity: Min 1,000 tonnes

Location: ddp China

Unit: CNY/tonne, normalized to Cr 50%

Payment terms: Cash, other payment terms normalized

Publication: Weekly. Tuesday between 2pm and 3pm London time

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**JAPAN**
**MB-FEC-0017** **Ferro-chrome high carbon 57-65% Cr, cif dup Japan, \$/lb**

Quality: 10-50mm lump. Cr 57% min, 65% max; C 6% min, 9% max; Si 2% min, 4% max; P 0.04% max; S 0.05% max

Quantity: Min 100 tonnes

Location: cif Japan

Unit: USD per lb of chrome contained

Payment terms: LC at sight and TT

Publication: Every other week. Thursday 2-3pm London time

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**SOUTHEAST ASIA & EAST ASIA**
**MB-FEC-0018** **Ferro-chrome high carbon 57-65% Cr, cif dup South Korea, \$/lb**

Quality: 10-50mm lump. Cr 57% min, 65% max; C 6% min, 9% max; Si 2% min, 4% max; P 0.04% max; S 0.05% max

Quantity: Min 100 tonnes

Location: cif South Korea

Unit: USD per lb of chrome contained

Payment terms: LC at sight and TT

Publication: Every other week. Thursday 2-3pm London time

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**EUROPE**
**MB-FEC-0004** **Ferro-chrome high carbon 6-8.5% C, basis 60-70% Cr, max 1.5% Si, delivered Europe, \$/lb Cr**

Quality: Lump. Cr 60-70%, C 6-8.5%, Si 1.5%. High-carbon ferro-chrome of the following brands and origins: Kazakhstan (Kazchrome); Russia (Tikhvin, Chelyabinsk); Turkey (Eti Krom); Sweden (Vargon Alloys); Albania (Albchrome)

Quantity: Min 24 tonnes

Location: Delivered consumer works Europe

Unit: USD per lb of chrome contained

Payment terms: 30 days, other payment terms normalized

Publication: Weekly. Tuesday between 2pm and 3pm London time

Notes: This price will be discontinued at the end of 2021

<p><b>MB-FEC-0021</b></p> <p>Quality: Lump, Cr 65-70%, C 6-8.5%, Si 1.5%.            Quantity: Min 24 tonnes            Location: Delivered consumer works Europe (other incoterms will be normalized)            Unit: USD per lb of chrome contained            Payment terms: 30 days, other payment terms normalized            Publication: Weekly, Tuesday at 2-3pm London time.</p>	<p><b>Ferro-chrome, high carbon, 6-8.5% C, basis 65-70% Cr, max 1.5% Si, delivered Europe, \$ per lb Cr</b></p>	<p><b>MB-FEC-0003</b></p> <p>Quality: Lump. Cr 65% basis (range 65-70% Cr), C 0.10% excluding material up to 0.06% C, Si 1.5% max, P 0.05% max, S 0.05% max            Quantity: Min 25 tonnes            Location: Delivered consumer works Europe            Unit: USD per lb of chrome contained            Payment terms: 30 days, other payment terms normalized            Publication: Fortnightly. Tuesday 2-3pm London time</p>	<p><b>Ferro-chrome 0.10% C, average 65-70% Cr, delivered Europe, \$/lb Cr</b></p>
<p><b>MB-FEC-0020</b></p> <p>Quality: Lump, Cr 60-64.9%, C 6-8.5%, Si 3% max.            Quantity: Min 24 tonnes            Location: cif major European ports (other incoterms will be normalized)            Unit: USD per lb of chrome contained            Payment terms: 30 days, other payment terms normalized            Publication: Weekly, Tuesday at 2-3pm London time.</p>	<p><b>Ferro-chrome, high carbon, 6-8.5% C, basis 60-64.9% Cr, max 3% Si, cif Europe, \$ per lb Cr</b></p>	<p><b>MB-FEC-0001</b></p> <p>Quality: Lump. Cr 65% min, Si 1% max, C 6-8%, P 0.015% max, Ti 0.05%            Quantity: Min 25 tonnes            Location: Delivered consumer works Europe            Unit: USD per lb of chrome contained            Payment terms: 30 days, other payment terms normalized            Publication: Fortnightly. Tuesday 2-3pm London time</p>	<p><b>Ferro-chrome low phosphorous, min 65% Cr, max 0.015% P, delivered Europe, \$/lb</b></p>
<p><b>MB-FEC-0002</b></p> <p>Quality: Lump. Cr 65% basis (range 60-70% Cr), C 0.06% max, Si 1.5% max, P 0.05% max, S 0.05% max            Quantity: Min 25 tonnes            Location: Delivered consumer works Europe            Unit: USD per lb of chrome contained            Payment terms: 30 days, other payment terms normalized            Publication: Fortnightly. Tuesday between 2pm and 3pm London time</p>	<p><b>Ferro-chrome low carbon, 65% Cr, max 0.06% C, delivered Europe, \$/lb Cr</b></p>	<p><b>MB-FEC-0016</b></p> <p>Quality: Lump. Basis 52% Cr, high carbon            Quantity: Min not specified            Location: Delivered consumer works Europe            Unit: US cents per lb of chrome contained            Payment terms: Not specified            Publication: Quarterly as per industry announcement to Johannesburg Stock Exchange            Notes: Fastmarkets does not independently assess this price, but publishes it as a reference. The price is settled every quarter by leading ferro-chrome producers and consumers and is then announced by a leading producer to the Johannesburg Stock Exchange. Fastmarkets obtains the benchmark number from market participants and/or from the official announcement.</p>	<p><b>Ferro-chrome lumpy Cr charge quarterly, basis 52% Cr (and high carbon), delivered Europe, \$/lb Cr</b></p>

**MB-FEC-0019** **Ferro-chrome lumpy Cr benchmark indicator, charge basis 52% (and high carbon), Europe, \$/lb**

Quality: Ferro-chrome lumpy, basis 52% chrome content  
 Unit: US cents per lb of chrome content to major European destinations  
 Publication: Weekly. Tuesday 3pm London time  
 Notes: The price indicates a representative level for the European ferro-chrome benchmark if it were to be settled on that Friday. It does so by using a proprietary Fastmarkets formula based on the historical relationship between the European ferro-chrome benchmark and Fastmarkets market data.

## UNITED STATES

**MB-FEC-0007** **Ferro-chrome high carbon 6-8% C, basis 60-65% Cr, max 2% Si, in-whs Pittsburgh, US cents/lb**

Quality: Cr min: 62.00%, si: max. 3.00%, C: 6.00- 8.00%  
 Quantity: Min 20 tons  
 Location: fob Pittsburgh  
 Unit: US cents per pound  
 Publication: Weekly. Thursday

**MB-FEC-0013** **Ferro-chrome low carbon 0.05%C, 65% Cr min, in-whs Pittsburgh, \$/lb**

Quality: Cr min: 65.00%, Ca: 0.05%, Si: max 1.00%  
 Quantity: 20 tons  
 Location: In-whs Pittsburgh  
 Unit: US cents per pound  
 Publication: Weekly. Thursday

**MB-FEC-0014** **Ferro-chrome low carbon 0.10%C, 62% Cr min, in-whs Pittsburgh, \$/lb**

Type: Assessed range  
 Currency: US cents per pound  
 Location: In-whs Pittsburgh  
 Quality: Cr min 62.00%, C: 0.10%, Si max: 1.00%  
 Minimum lot size: 20 tons  
 Publication: Weekly. Thursday

**MB-FEC-0015** **Ferro-chrome low carbon 0.15%C, 60% Cr min, in-whs Pittsburgh, \$/lb**

Type: Assessed range  
 Currency: US cents per pound  
 Location: In-whs Pittsburgh  
 Quality: Cr: min. 60.00%, C: 0.15%, Si: max. 1.00%  
 Minimum lot size: 20 tons  
 Publication: Weekly. Thursday

# Ferro-manganese

## EUROPE

**MB-FEW-0001** **Ferro-manganese basis 78% Mn max, standard 7.5% C, delivered Europe, €/tonne**

Quality: Lump in the range of 10-100mm, 90% min. Mn 75% min, 78% max; Si 2% max; C 6% min 8% max; P 0.35% max; S 0.04% max  
 Quantity: Min 100 tonnes  
 Location: Delivered consumer works Europe  
 Unit: EUR/tonne  
 Payment terms: Cash, other payment terms normalized  
 Publication: Weekly. Friday between 2pm and 3pm London time

## CHINA

**MB-FEW-0002** **Ferro-manganese 65% Mn min, max 7% C, in-whs China, yuan/tonne**

Quality: Lump. Mn 65-72%, Si 4.5% max, C 7.0% max, P 0.4% max, S 0.03% max  
 Quantity: Min 100 tonnes  
 Location: In-whs China  
 Unit: CNY/tonne, all Mn grades normalized to 65% on pro rata basis  
 Payment terms: Cash, other payment terms normalized  
 Publication: Weekly, Friday 2-3pm London time



## UNITED STATES

**MB-FEM-0001** **Ferro-manganese high carbon 78% Mn, standard 7.5% C, in-whs Pittsburgh, \$/long ton**

Quality: Mn 780%, C 7.5%  
 Quantity: Min 20 tons  
 Unit: US dollars per long ton  
 Location: In-warehouse Pittsburgh  
 Frequency: Weekly, Thursday

**MB-FEM-0003** **Ferro-manganese medium carbon 80% Mn, max 1.50% C, in-whs Pittsburgh, US cents/lb**

Quality: Manganese min 80%, carbon max 1.50%  
 Quantity: Min 20 tons  
 Unit: US cents per pound  
 Location: In-whs Pittsburgh  
 Frequency: Weekly, Thursday

# Ferro-silicon

## UNITED STATES

**MB-FES-0002** **Ferro-silicon 75% Si, in-whs Pittsburgh, US cents/lb**

Quality: Silicon 75.00%  
 Quantity: Min 20 tons  
 Location: In-warehouse Pittsburgh  
 Unit: US cents per pound  
 Publication: Weekly, Thursday

## CHINA

**MB-FES-0001** **Ferro-silicon 75% Si min, in-whs China, yuan/tonne**

Quality: Lump. Si 75-80%, Mn 0.4% max, Al: 2% max, Cr 0.3% max, P 0.035% max, S 0.02% max, C 0.1% max  
 Quantity: 100 tonnes  
 Location: In-whs China  
 Unit: CNY/tonne, price for all Si grades normalized to 75% on pro rata basis  
 Payment terms: Cash, other payment terms normalized  
 Publication: Weekly, Wednesday 2-3pm London time

**MB-FEH-0001**

**Ferro-silicon 75% Si min export, fob China, \$/tonne**

Quality: Lump. Si 75-80%, Mn 0.4% max, Al 2% max, Cr 0.3% max, P 0.035% max, S 0.02% max, C 0.1% max  
 Quantity: 100 tonnes  
 Location: fob China main ports  
 Unit: USD/tonne, normalized to 75% Si on pro rata basis  
 Payment terms: Cash, other payment terms normalized  
 Publication: Weekly, Wednesday 2-3pm London time

## EUROPE

**MB-FEH-0002** **Ferro-silicon lumpy basis 75% Si (scale pro rata), delivered Europe, €/tonne**

Quality: Lump. Si 75% basis (scale pro rata), Al 1.5% max, C 0.10-0.15% max, Ca 0.6% max, Ti 0.15% max, P 0.02% max, S 0.025% max  
 Quantity: Min 100 tonnes  
 Location: Delivered consumer works Europe  
 Unit: EUR/tonne  
 Payment terms: Cash, other payment terms normalized  
 Publication: Weekly, Friday between 2pm and 3pm London time

# Silico-manganese

## EUROPE

**MB-SIM-0002** **Silico-manganese lumpy 65-75% Mn, basis 15-19% Si (scale pro rata), major European destinations €/tonne**

Quality: Lump. Mn 65-75% (Scale pro rata), Si 15-19%, C 2-2.5%, P 0.3%, S 0.03%  
 Quantity: Min 100 tonnes  
 Location: Delivered consumer works Europe  
 Unit: EUR/tonne  
 Payment terms: Cash, other payment terms normalized  
 Publication: Weekly, Friday between 2pm and 3pm London time

**CHINA**


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<b>MB-SIM-0001</b>	<b>Silico-manganese 65% Mn min, max 17% Si, in-whs China, yuan/tonne</b>
Quality:	Lump. Mn 65-72%, Si 17%, C 1.8% max, P 0.25% max, S 0.04% max
Quantity:	Min 100 tonnes
Location:	ddp China
Unit:	CNY/tonne, all Mn grades normalized to 65% basis on pro rata basis
Payment terms:	Cash, other terms normalized
Publication:	Weekly. Friday between 2pm and 3pm London time

**INDIA**


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<b>MB-SIM-0004</b>	<b>Silico-manganese 65% Mn min, min 16% Si, fob India, \$/tonne</b>
Quality:	Lump. Mn: 65% Si: 16% C: 2% P:0.35% S:0.03%
Quantity:	Min 100 tonnes
Location:	fob India
Unit:	USD/tonne
Payment terms:	Letter of Credit
Publication:	Weekly. Friday between 2pm and 3pm London time

**UNITED STATES**


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<b>MB-SIM-0003</b>	<b>Silico-manganese 65% Mn min, min 16% Si, in-whs Pittsburgh, US cents/lb</b>
Quality:	Manganese min 65%, Si min 16%
Quantity:	20 tons
Location:	In-warehouse Pittsburgh
Unit:	US cents per pound
Publication:	Weekly. Thursday

## Ferro-nickel

**CHINA**


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<b>MB-FEN-0003</b>	<b>Ferro-nickel premium/discount, 26-32% Ni contained, cif China, \$/tonne</b>
Quality:	Ni typical 30% (range 26%-32%), P 0.0045% max, S 0.060% max
Quantity:	Min 100 nickel metal tonnes per lot
Location:	cif China
Unit:	USD/tonne
Payment terms:	Cash, other payment terms normalized
Publication:	Last Monday of each month between 2pm to 3pm London time
Notes:	Ferro-nickel price = (LME Ni price + premium/ discount) x nickel content

## Nickel Pig Iron

**CHINA**


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<b>MB-FEN-0001</b>	<b>Nickel pig iron, high-grade NPI content 10-15%, contract, ddp China, yuan/nickel unit price</b>
Quality:	Lump. Ni10-15%, Fe 80%, P 0.04% max, S 0.03% max, Si 4.5% max, C 4% max
Quantity:	Min 1,000 tonnes
Location:	Delivered duty paid China
Unit:	Yuan/nickel unit
Payment terms:	Cash
Publication:	Weekly. Friday 2-3pm UK time
Notes:	Packaged in 1-tonne big bags

<b>MB-FEN-0002</b>	<b>Nickel pig iron, high-grade NPI content 10-15%, spot, ddp China, yuan/nickel unit price</b>
Quality:	Lump. Ni10-15%, Fe 80%, P 0.04% max, S 0.03% max, Si 4.5% max, C 4% max
Quantity:	Min 500 tonnes
Location:	ddp China
Unit:	Yuan/nickel unit
Payment terms:	Cash
Publication:	Weekly. Friday 3-4pm UK time
Notes:	Packaged in 1-tonne big bags

## Noble alloys

# Molybdenum

### EUROPE

**MB-FEO-0003 Molybdenum drummed molybdic oxide 57% Mo min, in-whs Rotterdam, \$/lb Mo**

Quality: Sandy powder (0-4mm). Mo 57% min, Cu 0.5% max, S 0.1% max, P 0.05% max, Pb 0.05% max, C 0.1% max. All other elements should each be 0.10% max, with the exception of Si, which should be 6% max.

Quantity: Min 10 tonnes (+/- 2%)

Location: In-whs Rotterdam

Unit: USD per lb Mo

Payment terms: Cash; other terms normalized

Publication: Twice weekly. Wednesday and Friday between 2pm and 3pm London time

**MB-FEO-0001 Ferro-molybdenum 65% Mo min, in-whs Rotterdam, \$/kg Mo**

Quality: Lump 5-50mm, 90% min, Mo 65% min, Si 1.50% max, Cu 0.50% max, C 0.10% max, S 0.10% max, P 0.05% max. All other elements should be each 0.10% max, with the exception of Fe

Quantity: Min 10 tonnes (+/- 2%)

Location: In-whs Rotterdam

Unit: USD per kg Mo

Payment terms: Cash; other payment terms normalized

Publication: Twice weekly. Wednesday and Friday 2-3pm London time

### UNITED STATES

**MB-MO-0001 Molybdenum canned molybdic oxide, in-whs Pittsburgh, \$/lb**

Quality: Mo min 57.00%, copper max 0.50%, phosphorus 0.05%, lead 0.05%, sulphur 0.10%, carbon 0.10%, moisture 0.10%

Quantity: Min 10 tons

Location: In-whs US

Unit: USD per pound

Publication: Weekly. Thursday

**MB-FEO-0002 Ferro-molybdenum 65-70% Mo, in-whs Pittsburgh, \$/lb**

Quality: Mo 65-70%

Quantity: Min 10 tons

Location: In-whs Pittsburgh

Unit: USD per pound

Publication: Weekly. Thursday

### SOUTH KOREA

**MB-FEO-0004 Drummed molybdic oxide, in-warehouse Busan \$/lb Mo**

Quality: Sandy powder (0-4 mm). Mo 57% min, Cu 0.5% max, S 0.1% max, P 0.05% max, Pb 0.05% max, C 0.1% max. All other elements should each be 0.10% max, with the exception of Si, which should be 6% max.

Quantity: 10 tonnes (+/- 2%)

Location: In-whs Busan

Timing: Spot

Unit: USD per lb Mo

Payment terms: Cash; other terms normalized

Publication: Twice weekly. Wednesday and Friday 2-3pm London time

# Titanium

### EUROPE

**MB-FET-0001 Ferro-titanium 70% Ti, max 4.5% Al, ddp Europe, \$/kg Ti**

Quality: Lump. Ti 70%, Al 4.5%, V 3%, O2 2%, C 0.2%, S 0.05%, P 0.05%, Si 0.5%, N 0.5%, Sn 0.5%, Ni 0.05%, Cr 0.5%, Pb 0.01%, Bi 0.01%

Quantity: Min 10-tonne lots (+/- 2%)

Location: ddp Europe

Unit: USD per kg Ti

Payment terms: Cash (other payment terms normalized)

Publication: Weekly. Wednesday 2-3pm London

# Tungsten

## EUROPE

<b>MB-W-0001</b>	<b>Tungsten APT 88.5% WO3 min Europe, cif Rotterdam and Baltimore duty-free, \$/mtu WO3</b>
Quality:	White finely divided free-flowing crystals. WO3 88.5% min, Al 0.001% max, As 0.0005% max, Bi 0.0005% max, Ca 0.001% max, Cd 0.0005% max, Co 0.0005% max, Cr 0.0005% max, Cu 0.0005% max, Fe 0.001% max, K 0.001% max, Mn 0.001% max, Mg 0.001% max, Mo 0.002% max, Na 0.001% max, Ni 0.0005% max, P 0.001% max, Pb 0.0005% max, S:0.001% max, Sb 0.0005% max, Si 0.001% max, Sn 0.0005% max, Ti 0.0005% max, V 0.0005% max
Quantity:	Min 20 tonnes (+/- 2%)
Location:	cif Rotterdam and Baltimore, duty free
Unit:	USD per mtu WO3
Payment terms:	Cash. Delivered up to three months in advance considered spot business
Publication:	Weekly. Friday 2-3pm London time

## CHINA

<b>MB-W-0003</b>	<b>Tungsten APT 88.5% WO3 min, fob main ports China, \$/mtu WO3</b>
Quality:	White finely divided free-flowing crystals. WO3 88.5% min, Al 0.0005% max, As 0.001% max, Bi 0.0001% max, Ca 0.001% max, Cd 0.001% max, Co 0.005% max, Cr 0.001% max, Cu 0.0005% max, Fe 0.001% max, K 0.001% max, Mn 0.0005% max, Mg 0.0005% max, Mo 0.002% max, Na 0.001% max, Ni 0.0005% max, P 0.0007% max, Pb 0.0001% max, S 0.0008% max, Sb 0.0002% max, Si 0.001% max, Sn 0.0002% max, Ti 0.0005% max, V 0.001% max
Quantity:	Min 17 tonnes
Location:	Fob China main ports
Unit:	USD per mtu WO3
Payment terms:	Cash or 30 days
Publication:	Weekly. Wednesday 2-3pm London

<b>MB-W-0002</b>	<b>Tungsten concentrate 65% WO3, in-whs China, yuan/tonne</b>
Quality:	Powder. WO3 65% min, 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
Quantity:	Min 50 tonnes
Location:	China
Unit:	CNY/tonne
Payment terms:	Cash or 30 days
Publication:	Weekly. Wednesday 2-3pm London time

# Ferro-tungsten

## EUROPE

<b>MB-FEU-0001</b>	<b>Ferro-tungsten basis 75% W, in-whs dup Rotterdam, \$/kg W</b>
Quality:	Lump. W 75.00% min, C 0.40% max, S 0.08% max, Mn 0.50% max, As 0.10% max, Sn 0.08% max, P 0.05% max, Si 0.70% max, Cu 0.15% max, Sb 0.05% max
Quantity:	Min 3-tonne lots
Location:	dup Rotterdam
Unit:	USD per kg W
Payment terms:	Cash, other payment terms normalized
Publication:	Twice weekly. Wednesday and Friday 2-3pm London
Notes:	Packaged in 1-tonne big bags

## CHINA

<b>MB-FEU-0003</b>	<b>Ferro-tungsten basis 75% W, fob main ports China, \$/kg W</b>
Quality:	Lump. Material produced from tungsten ore and concentrate; W: 75.00% min. C: 0.40% max. S: 0.08% max. Mn: 0.50% max. As: 0.10% max. Sn: 0.08% max. P: 0.05% max. Si: 0.70% max. Cu: 0.15% max. Sb: 0.05% max
Quantity:	Min 5 tonnes
Location:	fob China main ports
Unit:	USD per kg W
Payment terms:	Cash, other terms normalized
Publication:	Weekly. Wednesday 2-3pm London

# Vanadium

## EUROPE

**MB-FEV-0001** **Ferro-vanadium basis 78% V min, 1st grade, ddp Western Europe, \$/kg V**

Quality: Lump. V 78%, Al 1.5%, Si 1.5%, C 0.25%, S 0.05%, P 0.06%, Mn 0.5%. Other elements trace only, with the exception of Fe

Quantity: Min 5 tonnes

Location: Delivered consumer works Europe

Unit: USD per kg V

Payment terms: Cash, other terms normalized

Publication: Twice weekly. Wednesday and Friday at 2-3pm London time

**MB-V-0001** **Vanadium pentoxide 98% V2O5 min, in-whs Rotterdam, \$/lb V2O5**

Quality: Brown flake. V 98% min, Si 0.25% max, Fe 0.30% max, S 0.03% max, P 0.05% max, As 0.02% max, Na<sub>2</sub>+K<sub>2</sub>O 1.50% max

Quantity: Min 5 tonnes (+/- 5%)

Location: In-warehouse Rotterdam

Unit: USD per lb V<sub>2</sub>O<sub>5</sub>

Payment terms: Cash, other terms normalized

Publication: Weekly. Friday 2-3pm London time

## CHINA

**MB-FEV-0003** **Ferro-vanadium 78% V min, fob China, \$/kg V**

Quality: Lump. V 78% min, Al 1.5% max, Si 2% max, C 0.06%, S 0.05%, P 0.05%, As 0.06%, Mn 0.5%, Cu 0.1%, Ni 0.15%, Mesh size 10-50mm, 90% min.

Quantity: Min 5 tonnes (+/- 5%)

Location: fob China (other delivery terms normalized)

Timing: Within 20 days

Unit: \$/kg V

Payment terms: L/C, T/T, other payment terms normalized

Publication: Weekly, Thursday 2-3pm London time

Notes: Low-liquidity measures are applied when necessary

## UNITED STATES

**MB-FEV-0002** **Ferro-vanadium 70-80% V, in-whs Pittsburgh, \$/lb**

Quality: V 70-80%

Quantity: Min 10 tons

Location: In-warehouse Pittsburgh

Unit: USD per lb

Publication: Weekly. Thursday

**MB-V-0002** **Vanadium pentoxide 98% V2O5 min, fob China, \$/lb V2O5**

Quality: Brown flake. V 98% min, Si, 0.25% max, Fe 0.30% max, S 0.03% max, P 0.05% max, As 0.02% max, Na<sub>2</sub>+K<sub>2</sub>O 1.50% max.

Quantity: Min 5 tonnes (+/- 5%)

Location: fob China (other delivery terms normalized)

Timing: Within 20 days

Unit: \$/lb V<sub>2</sub>O<sub>5</sub>

Payment terms: L/C, T/T, other payment terms normalized

Publication: Weekly, Thursday, 2-3pm London time

Notes: Low-liquidity measures are applied when necessary

**MB-V-0003** **Vanadium nitrogen, basis 77%V, 16% N, ex-works China**

Quality: Lump. V 77-81%, N 14-18%, C 6% max, P 0.06% max, S 0.10% max

Quantity: Min 20 tonnes (+/- 5%)

Location: Ex-works China

Unit: CNY/tonne

Payment terms: Cash, other terms normalized

Publication: Weekly, Thursday, between 2pm and 3pm London time

**MB-V-0004** **Vanadium pentoxide 98% V2O5 min, ex-works China**

Quality: Brown flake. V 98% min, Si, 0.25% max, Fe 0.30% max, S 0.03% max, P 0.05% max, As 0.02% max, Na<sub>2</sub>+K<sub>2</sub>O 1.50% max.

Quantity: Min 20 tonnes (+/- 5%)

Location: Ex-works China

Unit: CNY/tonne

Payment terms: Cash, other terms normalized

Publication: Weekly, Thursday, between 2pm and 3pm London time

## Ferro-niobium

<b>MB-FN-0001</b>	<b>Ferro-niobium 63-67%, delivered consumer works Europe, duty paid, \$/kg Nb</b>
Quality:	10-50mm lump. Nb 63-67%, C 0.2% max, Si 3.0% max, Al 1-2%, S 0.15% max, P 0.20% max, Ta 0.5% max
Quantity:	Minimum 5-tonne lots
Location:	Delivered consumer works Europe
Unit:	USD per kg Nb
Payment terms:	Cash. Other payment terms normalized
Publication:	Weekly, Wednesday 2-3pm London time
Notes:	Packaged in 250kg drums or one-tonne big bags

## Ores

### Bauxite

#### AFRICA

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<b>MB-BX-0014</b>	<b>Bauxite, fob Kamsar, Guinea, \$/dm tu</b>
Quality:	Total alumina 48.5% min, 53% max; total silica 1.20% min, 2.10% max; reactive silica 3.2% max; Fe 22% max; Ti 4% max; organic carbon 0.15% max; moisture content 5.5% min, 7.5% max
Quantity:	Minimum 20,000 tonnes
Location:	fob Kamsar (other ports normalized)
Timing:	Within two months
Unit:	USD per dmtu
Payment terms:	30 days after loading (other payment terms normalized)
Publication:	Monthly. Third Thursday of the month 2-3pm London time
Notes:	Bulk carrier

#### LATIN AMERICA

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<b>MB-BX-0015</b>	<b>Bauxite, fob Trombetas, Brazil, \$/dm tu</b>
Quality:	Total alumina 50.5% min, 55% max; total silica 4.3% min, 5.6% max; reactive silica 4% min, 5% max; Fe 12% max; Ti 1.5% max; moisture content 9% min, 10% max
Quantity:	Min 20,000 tonnes
Location:	fob Trombetas (other ports normalized)
Timing:	Within two months
Unit:	USD per dmtu
Payment terms:	30 days after loading (other payment terms normalized)
Publication:	Monthly. Third Thursday of the month between 2pm and 3pm London time
Notes:	Bulk carrier

## Chrome ore

### AFRICA

<b>MB-CHO-0003</b>	<b>Chrome ore South Africa UG2 concentrates index basis 42%, cif China, \$/tonne</b>
Quality:	Up to 1mm (95% min); Cr base 42%, range 40-43%; Silica max 6%; Alumina max 18%; MgO max 15%; P max 0.01%; S max 0.01%; chrome-iron ratio 1.2:1 min
Quantity:	Min 2,000 tonnes
Location:	cif China
Unit:	USD per tonne
Payment terms:	Payment at sight
Publication:	Weekly. Tuesday 3pm London time
Notes:	Bulk (container deals normalized)

### CHINA

<b>MB-CHO-0002</b>	<b>Chrome ore Turkish lumpy 40-42%, cfr main Chinese ports, \$/tonne</b>
Quantity:	1,000 tonnes
Quality:	Lump. Cr 40-42; Silica 15% max; Alumina 16% max; MgO 26% max; S 0.02%; P 0.01%; chrome-iron ratio 2.6:1 (2.5:1 min)
Location:	cfr China main ports
Unit:	USD per tonne
Payment terms:	Payment at sight
Publication:	Weekly. Tuesday Between 2pm and 3pm London time

## Manganese ore

### SOUTH AFRICA

<b>MB-MNO-0002</b>	<b>Manganese ore 37% Mn, fob Port Elizabeth, \$/dmtu</b>
Quality:	5.5-75mm lump. Mn base 37%, range 35-39%; Fe base 5%, max 10%; Silica base 5.5%, max 12%; P base 0.025%, max 0.160%; alumina base 0.2%, max 2%. Moisture content base 4%, max 12%
Quantity:	Min 5,000 tonnes
Location:	fob Port Elizabeth (South Africa)
Timing:	Within nine weeks
Unit:	US\$ per dry metric tonne unit
Payment:	Cash or equivalent
Publication:	Friday, 3pm London

### CHINA

<b>MB-MNO-0001</b>	<b>Manganese ore 44% Mn, cif Tianjin, \$/dmtu</b>
Quality:	5.5-75mm lump. Mn base 44%, range 42-48%; Fe base 5%, max 16%; silica base 11%, max 12%; P base 0.10%, max 0.16%; alumina base 5%, max 14%. Moisture base 4%, max 12%
Quantity:	Min 5,000 tonnes
Location:	cif Tianjin – normalized for other mainland China sea ports
Timing:	Within nine weeks
Unit:	US\$ per dry metric tonne unit, cif Tianjin, China
Payment:	Cash or equivalent
Publication:	Friday, 3pm London

<b>MB-MNO-0003</b>	<b>Manganese ore index 37% Mn, cif Tianjin, \$/dmtu</b>
Quality:	5.5-75mm lump. Mn base 37%, range 35-39%; Fe base 5%, max 10%; Silica base 5.5%, max 12%; P base 0.025%, max 0.160%; alumina base 0.2%, max 2%. Moisture content base 4%, max 12%
Quantity:	Min 5,000 tonnes
Location:	cif Tianjin – normalized for other China mainland sea ports
Timing:	Within nine weeks
Unit:	US\$ per dry metric tonne unit,
Payment:	Cash or equivalent
Publication:	Friday, 3pm London

**MB-MNO-0005 Manganese ore port index, base 44% Mn, range 42-48%, fot Tianjin China, yuan/dmtu**

Quality: 5.5-75mm lump. Mn base 44%, range 42-48%; Fe base 5%, max 16%; silica base 11%, max 12%; P base 0.10%, max 0.16%; alumina base 5%, max 14%. Moisture base 4%, max 12%

Quantity: Min 1,000 tonnes

Location: fot Tianjin – normalized for other China mainland sea ports

Timing: Immediate

Unit: CNY per dry metric tonne,

Payment: Cash or equivalent

Publication: Friday, 3pm London

**MB-MNO-0004 Manganese ore port index, base 37% Mn, range 35-39%, fot Tianjin China, yuan/dmtu**

Quality: 5.5-75mm lump. Mn base 37%, range 35-39%; Fe base 5%, max 10%; Silica base 5.5%, max 12%; P base 0.025%, max 0.160%; alumina base 0.2%, max 2%. Moisture content base 4%, max 12%

Quantity: Min 1,000 tonnes

Location: fot Tianjin – normalized for other China mainland sea ports

Timing: Immediate

Unit: Yuan per dry metric tonne unit

Payment: Cash or equivalent

Publication: Friday, 3pm London

**MB-NIO-0002 Laterite ore with 1.5% Ni content, cif China, \$/tonne**

Quality: Nickel ore 1.5% Ni, 15-20% Fe, water content 30-35%

Quantity: 50,000 tonnes

Location: cif China

Unit: USD per tonne

Payment terms: Cash, other payment terms normalized

Publication: Weekly. Friday 2-3pm London time

## Nickel ore

### CHINA

**MB-NIO-0001 Nickel ore 1.8% basis 15-20% Fe water content: 30-35% Si:Mg ratio<2 lot size 50,000 tonnes, cif China, \$/tonne**

Quality: 1.8% Ni, 15-20% Fe, Water content 30-35%, Si:Mg ratio <2

Quantity: 50,000 tonnes

Location: cif China

Unit: USD per tonne

Payment terms: Letter of Credit

Publication: Weekly. Friday 2-3pm London time



## Minor metals

Fastmarkets' antimony, arsenic, bismuth, cadmium, chromium, gallium, hafnium, indium, manganese, mercury, rhenium and selenium prices are produced in line with the specifications published by the Minor Metals Trade Association.

## Antimony

### CHINA

#### **MB-SB-0003 Antimony MMTA standard grade II, ddp China, yuan/tonne**

Quality:	Ingot. MMTA standard Grade II. Sb 99.65% min, As 0.1% max, Pb 0.2% max, Se 0.002% max, Cd 0.002% max, Sn 0.005% max, Te 0.005% max, Bi 0.01% max, Cu 0.02% max, Fe 0.02% max
Quantity:	1 tonne
Location:	Delivered duty paid China
Unit:	CNY/tonne
Payment terms:	Cash
Publication:	Weekly. Wednesday between 2pm and 3pm London time

### EUROPE

#### **MB-SB-0002 Antimony MMTA standard grade II, in-whs Rotterdam, \$/tonne**

Quality:	Ingot. Sb 99.65% min, As 0.15% max, Se 50ppm max
Quantity:	10 tonnes (+/-2%)
Location:	In-whs Rotterdam
Timing:	Prompt, within 10 calendar days
Unit:	USD per tonne
Payment terms:	Cash, other payment terms normalized
Publication:	Twice weekly. Wednesday and Friday 2-3pm London time
Notes:	Original producer packaging, on pallets or in wooden cases

#### **MB-SB-0001**

#### **Antimony max 100 ppm Bi, in-whs Rotterdam, \$/tonne**

Quantity:	Min 10 tonnes (+/-2%)
Quality:	Ingot. Sb Min 99.65% min, Bi 100ppm max, Se 50ppm max, Cu 200ppm max, Fe 200ppm max, Pb 0.2% max
Location:	In-whs Rotterdam
Timing:	Prompt, within ten calendar days
Unit:	USD/tonne
Payment terms:	Cash, other payment terms normalized
Publication:	Twice weekly. Wednesday and Friday 2-3pm London time
Notes:	Original producer packaging, on pallets or in wooden cases

## Arsenic

### EUROPE

#### **MB-AS-0001 Arsenic 99.7% min As, in-whs Rotterdam, \$/lb**

Quality:	Lumpy, fist-sized and smaller. As 99% min, no other elements specified
Quantity:	1 tonne (+/-2%)
Location:	In-whs Rotterdam
Timing:	Prompt release
Unit:	USD per lb
Payment terms:	Cash, other payment terms normalized
Publication:	Twice weekly. Wednesday and Friday 2-3pm London
Notes:	Original producer poly-lined steel drums, each 50kg net, in accordance with the IMDG code and RID & ADR rules

# Bismuth

## EUROPE

<b>MB-BI-0001</b>	<b>Bismuth 99.99% Bi min, in-whs Rotterdam, \$/lb</b>
Quality:	Ingot. Bi 99.99%, no other elements specified
Quantity:	Min 1 tonne
Location:	Rotterdam
Timing:	Prompt release
Unit:	USD/lb
Payment terms:	Cash, other payment terms normalized
Publication:	Twice weekly. Wednesday and Friday 2-3pm London time
Notes:	Original producer packaging

## CHINA

<b>MB-BI-0002</b>	<b>Bismuth 99.99% Bi min, in-whs China, yuan/tonne</b>
Quality:	Ingot. Bi 99.99% min, no other elements specified
Quantity:	1 tonne
Location:	In-whs China
Unit:	CNY/tonne
Payment terms:	Cash, other payment terms normalized
Publication:	Weekly. Friday 2-3pm London time

# Cadmium

## GLOBAL

<b>MB-CD-0001</b>	<b>Cadmium 99.95% min, cif global ports, cents/lb</b>
Quality:	Sticks or ingots. Cd 99.95%, no other elements specified
Quantity:	Min 10 tonnes
Location:	CIF global port basis
Timing:	Prompt release
Unit:	US cents per lb
Payment terms:	Cash, other payment terms normalized
Publication:	Twice weekly. Wednesday and Friday 2-3pm London

## MB-CD-0002

### **Cadmium 99.99% min, cif global ports, cents/lb**

Quality:	Sticks or ingots. Cd 99.99%, no other elements specified
Quantity:	Min 10 tonnes
Location:	cif global port basis
Timing:	Prompt release
Unit:	US cents per lb
Payment terms:	Cash, other terms normalized
Publication:	Twice weekly. Wednesday and Friday 2-3pm London time

# Chromium

## EUROPE

## MB-CR-0001

### **Chromium alumino-thermic 99% min, in-whs Rotterdam, \$/tonne**

Quality:	Lump conforming to MMTA Russian X99H4. Cr 99% min, Fe 0.5% max, Al 0.2% max, Si 0.2% max, C 0.03% max, S 0.02% max, Pb 0.0008% max, Cu 0.01% max, P 0.02% max, Zn 0.006% max, Sb 0.008% max, Sn 0.004% max, Bi 0.0005% max, As 0.01% max, Co 0.005% max, N 0.04% max
Quantity:	Min 10 tonnes (+/-2%)
Location:	In-whs Rotterdam
Timing:	Prompt release
Unit:	USD per tonne
Payment terms:	Cash, other terms normalized
Publication:	Weekly. Friday between 2pm and 3pm London time
Notes:	Steel drums of uniform net weight, usually 300kg

## UNITED STATES

## MB-CR-0002

### **Chromium alumino-thermic 99% min ex-US warehouse \$/lb**

Quality:	Lump. Min 99% chromium
Quantity:	3 tonnes
Location:	Ex-warehouse, US
Unit:	USD per pound
Publication:	Once a week every Thursday
Notes:	Packaged in drums

# Cobalt

## CHINA

<b>MB-CO-0012</b>	<b>Cobalt tetroxide 72.6% Co min, delivered China, yuan/tonne</b>
Quality:	Min 72.6% Co
Location:	Delivered China
Unit:	CNY/tonne
Quantity:	Min 1 tonne
Payment terms:	Cash
Publication:	Twice weekly. Wednesday and Friday between 2pm and 3pm London time

<b>MB-CO-0001</b>	<b>Cobalt 99.8% Co min, ex-works China, yuan/tonne</b>
Quality:	Cobalt metal, Co 99.8% min
Location:	Ex-works China
Unit:	CNY/tonne
Quantity:	Min 1 tonne
Form:	Cathode
Payment terms:	Cash
Publication:	Twice weekly. Wednesday and Friday between 2pm and 3pm London time

## EUROPE

<b>MB-CO-0004</b>	<b>Cobalt alloy grade, in-whs Rotterdam, \$/lb</b>
Quality:	Min 99.8% cobalt metal; standard specifications of the following brands in original packaging: Nikkelverk cut cathodes, Vale cobalt rounds, SMM cut cathodes, Jinchuan cut cathodes, Jiangsu (KLK) broken cathodes, Sherritt briquettes
Quantity:	Minimum 1 tonne, maximum 100 tonnes
Location:	Rotterdam, in-warehouse
Timing:	Within 30 days, other terms normalized
Unit:	US\$ per lb
Payment terms:	Cash; other terms normalized
Publication:	Daily. Monday to Friday, at 3pm London time

<b>MB-CO-0005</b>	<b>Cobalt standard grade, in-whs Rotterdam, \$/lb</b>
Quality:	Min 99.8% cobalt metal; standard specifications of the following brands in original packaging: Katanga cathodes, Chambishi broken cathodes, CTT broken cathodes, Minara briquettes, Ambatovy briquettes, Norilsk grade 1 and grade 2 cut cathodes (production since January 2019)
Quantity:	Minimum 1 tonne, maximum 100 tonnes
Location:	Rotterdam, in-warehouse
Timing:	Within 30 days, other terms normalized
Unit:	US\$ per lb
Payment terms:	Cash; other terms normalized
Publication:	Daily. Monday to Friday, at 3pm London time

\* Fastmarkets MB changed the names of its benchmark in-warehouse Rotterdam assessments in January 2019. From January 2019, the name 'standard-grade' replaced the name 'low-grade'. The name 'alloy-grade' replaced the name 'high-grade'.

# Cobalt sulfate

Please see **Battery Raw Materials** section.

# Gallium

## EUROPE

<b>MB-GA-0001</b>	<b>Gallium 99.99% Ga min, in-whs Rotterdam, \$/kg</b>
Quality:	Ingot. Ga: 99.99% min, no other elements specified
Quantity:	Min 100kg (+/- 2%)
Location:	In-whs Rotterdam
Timing:	Prompt release
Unit:	USD/kg
Payment terms:	Cash, other terms normalized
Publication:	Twice weekly. Wednesday and Friday 2-3pm London time
Notes:	Packed in plastic sleeves, original producer cases

<b>MB-GA-0002</b>	<b>Gallium 99.99% Ga min, in-whs China, yuan/kg</b>
Quality:	Ingot. Ga: 99.99% min, no other elements specified
Quantity:	Min 50kg
Location:	China
Unit:	CNY/kg
Payment terms:	Cash, other payment terms normalized
Publication:	Weekly. Wednesday by 3pm London time.

<b>MB-GER-0001</b>	<b>Germanium dioxide, in-whs China, \$/kg</b>
Quality:	GeO <sub>2</sub> 99.99 % min, Ge 69 % approx. White powder
Quantity:	Min 100 kg (+/- 2%)
Location:	In-whs China
Timing:	Prompt release
Unit:	USD/kg
Payment terms:	Cash, other payment terms normalized
Publication:	Twice-weekly. Wednesday and Friday between 2pm and 3pm London time
Notes:	Original producer cases, normally 25kg each

## Germanium

### CHINA

<b>MB-GER-0004</b>	<b>Germanium 99.999% Ge min, in-whs China, yuan/kg</b>
Quality:	Ingot with no specific dimension or weight. Ge 99.999% min, 50ohm/cm; no other elements specified
Quantity:	Min 50 kg
Location:	In-whs China
Unit:	CNY/kg
Payment terms:	Cash, other payment terms normalized
Publication:	Weekly. Wednesday by 3pm London time

### EUROPE

<b>MB-GER-0003</b>	<b>Germanium 99.99% Ge, in-whs Rotterdam, \$/kg</b>
Quality:	Min 100 kg (+/- 2%)
Quality:	Ingot. Ga 99.999%, no other elements specified
Location:	In-whs Rotterdam
Timing:	Prompt release
Unit:	USD/kg
Payment:	Cash, other payment terms normalized
Publication:	Twice-weekly. Wednesday and Friday between 2pm and 3pm London time
Notes:	Packed in plastic sleeves, original producer cases

## Hafnium

### GLOBAL

<b>MB-ZIR-0003</b>	<b>Hafnium, max 1% Zr, in-whs global locations, \$/kg</b>
Quality:	Hf+Zr 99.8% min; Zr 1%. Uniform lots of 5kg max cut ingot, plate, sheet or bar
Quantity:	Min 50kg
Location:	Global
Unit:	USD/per kg
Payment terms:	Cash, other payment terms normalized
Publication:	Fortnightly. Friday 2-3pm London time
Notes:	Hafnium is classed as a 'dual use' metal under the Non-proliferation of Nuclear Weapons Treaty and may require end-user statements and import/export licences

# Indium

## EUROPE

<b>MB-IN-0002</b>	<b>Indium 99.99%, in-whs Rotterdam, \$/kg</b>
Quality:	In: 99.99%, no other elements specified. Ingots, usually between 0.5kg and 3.5 kg; also 10 kg ingots
Quantity:	Min 100kg
Location:	In-whs Rotterdam
Timing:	Prompt release
Unit:	USD/kg
Payment terms:	Cash, other terms normalized
Publication:	Twice-weekly. Wednesday and Friday 2-3pm London time
Notes:	Original producer wooden cases

## CHINA

<b>MB-IN-0003</b>	<b>Indium 99.99% ex-works China CNY/kg</b>
Quality:	500g ingot. In 99.995% min, Cu 0.0005% max, Pb 0.0005% max, Zn 0.0005% max, Cd 0.0005% max, Fe 0.0005% max, Ti 0.0005% max, Sn 0.0010% max, As 0.0005% max, Al 0.0005% max
Quantity:	Min 1kg
Location:	Ex-works China
Unit:	CNY per kg
Payment terms:	Cash on spot
Publication:	Weekly. Wednesday between 2pm and 3pm London time

# Magnesium

## EUROPE

<b>MB-MG-0001</b>	<b>Magnesium 99.9%, in-whs Rotterdam, \$/tonne</b>
Quality:	Ingots, free from oxidation, of uniform size and weight. Mg 99.9% min, Fe 0.04% max, Si 0.02% max, Ni 0.002% max, Cu 0.01% max, AL 0.02% max, Mo 0.03% max, Cl 0.05% max, others 0.1% max
Quantity:	20 tonnes (+/- 2%)
Location:	In-whs Rotterdam
Unit:	USD/tonne
Payment terms:	Cash, other terms normalized
Publication:	Weekly. Friday 2-3pm London time

## CHINA

<b>MB-MG-0003</b>	<b>Magnesium 99.9%, exw China, yuan/tonne</b>
Quality:	Ingot. Mg 99.9% min
Quantity:	Min 20 tonnes (+/- 2%)
Location:	Ex-works China
Unit:	CNY/tonne
Payment terms:	Cash on spot
Publication:	Weekly. Friday 2-3pm London time
<b>MB-MG-0002</b>	<b>Magnesium 99.9% Mg min, fob China main ports, \$/tonne</b>
Quality:	Ingot. Mg 99.9% min
Quantity:	Min 10 tonnes (+/-2%)
Location:	fob China main ports
Unit:	USD/tonne
Payment terms:	LC or TT
Publication:	Weekly. Friday between 2pm and 3pm London time

# Manganese

## EUROPE

<b>MB-MN-0001</b>	<b>Manganese 99.7% electrolytic manganese flake, in-whs Rotterdam, \$/tonne</b>
Quality:	Flake. Mn: 99.7% S: 500 ppm max P: 50 ppm max C: 400 ppm max Fe+Se+Si: 0.205% max
Quantity:	Min 25 tonnes (+/-2%)
Location:	Rotterdam
Timing:	Prompt, within ten calendar days
Unit:	USD/tonne
Payment terms:	Cash, other payment terms normalized
Publication:	Twice-weekly. Wednesday and Friday by 3pm London time
Notes:	Big bags or steel drums

**UNITED STATES**
**MB-MN-0006 Manganese electrolytic metal 99.7% Mn min, ex-whs US, \$/lb**

Quality:	Flake. Min 99.7% manganese
Quantity:	Min 10 tonnes
Location:	Ex-warehouse, US
Unit:	<b>USD per pound</b>
Payment terms:	Cash, other terms normalized
Publication:	Weekly, every Thursday
Notes:	Bulk

**CHINA**
**MB-MN-0007 Manganese 99.7% electrolytic manganese flake, fob China, \$/tonne**

Quality:	Flake; Mn: 99.7% basis; S: 500 ppm max; P: 50 ppm max; C: 400 ppm max; Fe+Se+Si: 0.205% max; packaged as big bags or steel drums
Quantity:	Min 20 tonnes
Location:	fob China main ports
Timing:	Spot, within one week
Unit:	USD per tonne
Payment terms:	TT or LC
Publication:	Weekly. Friday 2-3pm London time

# Mercury

**GLOBAL**
**MB-HG-0001 Mercury 99.99%, in-whs global locations, \$/flask**

Quality:	Free-flowing liquid. Hg 99.99%, no other elements specified
Quantity:	50 flasks with zero tolerance
Location:	Global
Timing:	Within one calendar month
Unit:	USD per flask
Payment terms:	Cash, other terms normalized
Publication:	Fortnightly. Friday between 2pm and 3pm London time
Notes:	34.5kg UN-approved steel flasks

# Rhenium

**EUROPE**
**MB-RE-0001 Rhenium APR catalytic grade, in-whs dup Rotterdam, \$/kg**

Quality:	White, free flowing powder/crystal ammonium perrhenate, Re 68.5 - 69.8% min
Quantity:	Min 20 kg (+/-2%)
Location:	Duty unpaid Rotterdam
Unit:	USD/kg
Delivery time:	Within one calendar month
Payment terms:	Cash, other terms normalized
Publication:	Fortnightly. Friday 2-3pm London
Notes:	Uniform IMDG-approved containers, individually sealed and numbered

**MB-RE-0002 Rhenium metal pellets 99.9% Re min, in-whs dup, Rotterdam \$/lb**

Quality:	White, free flowing powder/crystal rhenium pellets, Re 99.9% min
Quantity:	Min 10 kg (+/-2%)
Location:	Rotterdam, duty unpaid
Timing:	Within one calendar month
Unit:	USD/lb
Payment terms:	Cash, other terms normalized
Publication:	Fortnightly. Friday by 3pm London time
Notes:	In uniform IMDG approved containers, individually sealed and numbered

# Selenium

**EUROPE**
**MB-SE-0002 Selenium 99.5% Se min, in-whs Rotterdam, \$/lb**

Quality:	Powder of minus 200 mesh or granules sizing 1-5 mm. Se 99.5% min, no other elements specified
Quantity:	Min 250kg (+/-2%)
Location:	In-whs Rotterdam
Timing:	Prompt release
Unit:	USD/lb
Payment terms:	Cash, other terms normalized
Publication:	Twice-weekly. Wednesday and Friday 2-3pm London time
Notes:	Original producer packaging, normally 25kg net

## CHINA

<b>MB-SE-0003</b>	<b>Selenium 99.9% Se min, in-whs China, yuan/kg</b>
Quality:	Powder of minus 200 mesh or granules size 1-5 mm. Se 99.9% min, no other elements specified
Quantity:	Min 100 kg
Location:	In-whs China
Unit:	CNY/kg
Payment terms:	Cash, other payment terms normalized
Publication:	Weekly. Friday by 3pm London time

## Silicon

### EUROPE

<b>MB-SI-0001</b>	<b>Silicon grade 4-4-1 99% Si min, in-whs Rotterdam, €/tonne</b>
Quality:	10-100mm lump 90% min. Si 99% min, Fe 0.4% max, Al 0.4% max, Ca 0.1% max
Quantity:	Min 25 tonnes (+/- 2%)
Location:	In-whs Rotterdam
Unit:	EUR/tonne
Payment terms:	Cash, other terms normalized
Publication:	Weekly. Friday between 2pm and 3pm London time
Notes:	1 tonne big bag

<b>MB-SI-0004</b>	<b>Silicon grade 5-5-3 98.5% Si min, in-whs Rotterdam, €/tonne</b>
Quality:	10-100mm lump. Silicon 98.50%, iron 0.50% max, aluminium 0.50% max, calcium 0.30% max
Quantity:	Min 25 tonnes (+/- 2%)
Location:	In-whs Rotterdam
Timing:	Prompt
Unit:	EUR/Tonne
Payment terms:	Cash, other terms normalized
Publication:	Once a week. Friday between 2pm and 3pm London time
Notes:	1 tonne big bag

## CHINA

<b>MB-SI-0002</b>	<b>Silicon export 98.5% Si min, fob China, \$/tonne</b>
Quality:	Lump. Si 98.5% min, Fe 0.5% max, Al 0.5% max, Ca 0.3% max
Quantity:	Min 20 tonnes
Location:	fob China main ports
Unit:	USD/tonne
Payment terms:	TT
Publication:	Weekly. Friday 2-3pm London time

## UNITED STATES

<b>MB-SI-0003</b>	<b>Silicon, ddp US, US cents/lb</b>
Quality:	Si: 98.50%, Fe: 0.50%, Al: 0.50%, Ca: 0.30%
Quantity:	Min 20 tons
Location:	Delivered US
Unit:	US cents per lb
Publication:	Weekly, Thursday 4-5pm New York time

## Tantalum

### CHINA

<b>MB-TA-0001</b>	<b>Tantalite, basis min 25% Ta2O5, cif China</b>
Quality:	Lump 0-10mm grain concentrate; Ta2O5 25% min; Nb2O5 15% min; U3O8+ThO2 0.10% max
Quantity:	Minimum 10-tonne lots
Location:	cif main ports China
Unit:	USD per lb Ta2O5
Payment terms:	Provisional payment against scan copy of the full set of documents, balance upon finalization or DP or provisional payment after arrival at destination port, balance upon finalization; other payment terms normalized.
Publication:	Weekly; Fridays 2-3pm London time.

## Tellurium

### EUROPE

<b>MB-TE-0001</b>	<b>Tellurium 99.9-99.99% Te min, in-whs Rotterdam, \$/kg</b>
Quality:	Ingots, sticks or powder. Te 99.9-99.99%, no other elements specified
Quantity:	Min 100 kg (+/-2%)
Location:	In-whs Rotterdam
Timing:	Prompt
Unit:	USD/kg
Payment terms:	Cash, other terms normalized
Publication:	Twice-weekly. Wednesday and Friday between 2pm and 3pm London time
Notes:	Original producer packaging

### CHINA

<b>MB-TE-0002</b>	<b>Tellurium 99.99% Te min, in-whs China, yuan/kg</b>
Quality:	Ingots, sticks or powder. Te 99.99% min, no other elements specified
Quantity:	Min 500kg
Location:	In-whsChina
Unit:	CNY/kg
Payment terms:	Cash, other terms normalized
Publication:	Weekly. Friday 2-3pm London time

## Battery raw materials Cobalt sulfate

### CHINA

<b>MB-CO-0017</b>	<b>Cobalt sulfate 20.5% Co basis, exw China, yuan/tonne</b>
Quality:	Crystal, feed from cobalt ores & concentrates, cobalt intermediates, such as crude cobalt hydroxide (materials produced from cobalt scrap are excluded). Co 20.5% basis, Ni 0.001% max, Cu 0.001% max, Fe 0.001% max, Zn 0.001% max
Quantity:	Min 1 tonne
Timing:	Within 30 days
Unit:	CNY/tonne
Payment terms:	On bank acceptance (other terms normalized)
Publication:	Twice weekly. Wednesday and Friday, 2-3pm London time

## Cobalt hydroxide

### CHINA

<b>MB-CO-0020</b>	<b>Cobalt hydroxide index 30% Co min, cif China, \$/lb</b>
Quality:	Units produced from large-scale mining activity, with the following chemical composition: Co 30% min, Mn 6.5% max, Mg 6.5% max, S 5% max; Cd 100ppm max; limited concentration of natural radioactivity: GB20664-2006 (suitable for customs clearance into China).
Quantity:	Min 50 tonnes (cobalt content)
Location:	cif China (other terms normalized)
Timing:	45 days
Unit:	\$/lb
Payment terms:	Letter of credit at sight, current price month ('M')
Publication time:	Between 2pm and 3pm London time, Friday, weekly
Note:	Where the pricing day falls on a public holiday in England and Wales, the index will be published on the closest working day preceding that date.



**MB-CO-0021 Cobalt hydroxide payable indicator, min 30% Co, cif China, % payable of Fastmarkets' standard-grade cobalt price (low-end)**

Quality:	Units produced from large-scale mining activity, with the following chemical composition: Co 30% min, Mn 6.5% max, Mg 6.5% max, S 5% max; Cd 100ppm max; limited concentration of natural radioactivity: GB20664-2006 (suitable for customs clearance into China).
Quantity:	Min 50 tonnes (cobalt content)
Location:	cif China (other terms normalized)
Timing:	45 days
Unit:	% payable of Fastmarkets' standard-grade cobalt price (low end, \$/lb)
Payment terms:	Letter of credit at sight, current and following price month ('M' and 'M+1')
Publication:	Twice weekly, Wednesday and Friday, 3pm London time.
Notes:	Where the publication day falls on a public holiday in China, the assessment will be rolled over from previous pricing session.

## Lithium

### CHINA

**MB-LI-0036 Lithium carbonate 99.5% Li<sub>2</sub>CO<sub>3</sub> min, battery grade, spot price range exw domestic China, yuan/tonne**
**MB-LI-0042 Lithium carbonate index, min 99.5% Li<sub>2</sub>CO<sub>3</sub>, battery grade, exw China, yuan/tonne**

Quality:	Powder, accepted by buyer for use in battery applications and with the chemical composition: Li <sub>2</sub> CO <sub>3</sub> 99.5% min; Na 0.025% max; Ca 0.005% max; Mg 0.008% max; magnetic impurities 300ppb max
Quantity:	Min 5 tonnes
Location:	China ex-works, VAT included
Timing:	30 days
Unit:	CNY/tonne
Publication:	Weekly. Thursday by 4pm London
Notes:	Index and assessment. The tonnage-weighted index is intended to run in parallel with the existing assessment.

**MB-LI-0040 Lithium hydroxide monohydrate 56.5% LiOH.H<sub>2</sub>O min, battery grade, spot price range exw domestic China, yuan/tonne**

Quality:	Powder, accepted by buyer for use in battery applications and with the chemical composition LiOH.H <sub>2</sub> O 56.5% min; CO <sub>2</sub> <0.35%; Ca 0.005% max; SO <sub>4</sub> 0.01% max; Cl- 0.002% max
Quantity:	Min 5 tonnes
Location:	China ex-works, VAT included
Timing:	30 days
Unit:	CNY/tonne
Publication:	Weekly. Thursday by 4pm London

### EAST ASIA, SOUTHEAST ASIA

**MB-LI-0029 Lithium carbonate 99.5% Li<sub>2</sub>CO<sub>3</sub> min, battery grade, spot prices cif China, Japan & Korea, \$/kg**

Quality:	Powder, accepted by buyer for use in battery applications and with the chemical composition: Li <sub>2</sub> CO <sub>3</sub> 99.5% min (Min. 99.2% Li <sub>2</sub> CO <sub>3</sub> accepted if it can be normalized to 99.5%); Na 0.060% max; Ca 0.016% max; Mg 0.008% max; magnetic impurities 300ppb max
Quantity:	Min 5 tonnes
Location:	cif main Chinese Japanese & South Korean ports (other ports normalized)
Timing:	60 days
Unit:	USD/kg
Publication:	Weekly. Thursday by 4pm London

**MB-LI-0033 Lithium hydroxide monohydrate 56.5% LiOH.H<sub>2</sub>O min, battery grade, spot price cif China, Japan & Korea, \$/kg**

Quality:	Powder, accepted by buyer for use in battery applications and with the chemical composition LiOH.H <sub>2</sub> O 56.5% min; CO <sub>2</sub> <0.35%; Ca 0.020% max; SO <sub>4</sub> 0.015% max; Cl- 0.005% max
Quantity:	Min 5 tonnes
Location:	cif main Chinese Japanese & South Korean ports (other ports normalized)
Timing:	60 days
Unit:	USD/kg Form: Powder
Publication:	Weekly. Thursday by 4pm London

**MB-LI-0027**      **Lithium carbonate 99.5% Li<sub>2</sub>CO<sub>3</sub> min, battery grade, contract price cif China, Japan & Korea, \$/kg**

Quality: Powder, accepted by buyer for use in battery applications and with the chemical composition: Li<sub>2</sub>CO<sub>3</sub> 99.5% min (Min. 99.2% Li<sub>2</sub>CO<sub>3</sub> accepted if it can be normalized to 99.5%); Na 0.060% max; Ca 0.016% max; Mg 0.008% max; magnetic impurities 300ppb max

Quantity: Min 20 tonnes

Location: cif China, Japan & South Korea

Timing: Up to 1 year

Unit: USD/kg

Publication: Monthly. Last Wednesday of the month between 3pm and 4pm London time

**MB-LI-0031**      **Lithium hydroxide monohydrate 56.5% LiOH.H<sub>2</sub>O min, battery grade, contract price cif China, Japan & Korea, \$/kg**

Quality: Powder, accepted by buyer for use in battery applications and with the chemical composition LiOH.H<sub>2</sub>O 56.5% min; CO<sub>2</sub> <0.35%; Ca 0.020% max; SO<sub>4</sub> 0.015% max; Cl<sup>-</sup> 0.005% max

Quantity: Min 20 tonnes

Location: cif China, Japan & South Korea

Timing: Up to 1 year

Unit: USD/kg

Publication: Monthly. Last Wednesday of the month, 3-4pm London time

**EUROPE & US**

**MB-LI-0023**      **Lithium carbonate 99.5% Li<sub>2</sub>CO<sub>3</sub> min, battery grade, spot price ddp Europe and US, \$/kg**

Quality: Powder, accepted by buyer for use in battery applications and with the chemical composition: Li<sub>2</sub>CO<sub>3</sub> 99.5% min (Min. 99.2% Li<sub>2</sub>CO<sub>3</sub> accepted if it can be normalized to 99.5%); Na 0.060% max; Ca 0.016% max; Mg 0.008% max; magnetic impurities 300ppb max

Quantity: Min 5 tonnes

Location: ddp US & Europe

Timing: 30 days

Unit: USD/kg

Publication: Weekly. Thursday 3-4pm London time

**MB-LI-0025**      **Lithium hydroxide monohydrate 56.5% LiOH.H<sub>2</sub>O min, battery grade, spot price ddp Europe and US, \$/kg**

Quality: Powder, accepted by buyer for use in battery applications and with the chemical composition LiOH.H<sub>2</sub>O 56.5% min; CO<sub>2</sub> <0.35%; Ca 0.020% max; SO<sub>4</sub> 0.015% max; Cl<sup>-</sup> 0.005% max

Quantity: Min 5 tonnes

Location: ddp US & Europe

Timing: 30 days

Unit: USD/kg

Publication: Weekly. Thursday 3-4pm London time

**MB-LI-0022**      **Lithium carbonate 99.5% Li<sub>2</sub>CO<sub>3</sub> min, battery grade, contract price ddp Europe and US, \$/kg**

Quality: Powder, accepted by buyer for use in battery applications and with the chemical composition: Li<sub>2</sub>CO<sub>3</sub> 99.5% min (Min. 99.2% Li<sub>2</sub>CO<sub>3</sub> accepted if it can be normalized to 99.5%); Na 0.060% max; Ca 0.016% max; Mg 0.008% max; magnetic impurities 300ppb max

Quantity: Min 20 tonnes

Location: ddp US & Europe

Timing: Up to 1 year

Unit: USD/kg

Publication: Monthly. Last Wednesday of the month, 3-4pm London time

**MB-LI-0024**      **Lithium hydroxide monohydrate 56.5% LiOH.H2O min, battery grade, contract price ddp Europe and US, \$/kg**

Quality: Powder, accepted by buyer for use in battery applications and with the chemical composition LiOH.H2O 56.5% min; CO2 <0.35%; Ca 0.020% max; SO4 0.015% max; Cl- 0.005% max

Quantity: Min 20 tonnes

Location: DDP US & Europe

Timing: Up to 1 year

Unit: USD/kg

Publication: Monthly, last Wednesday of the month 3-4pm London time

## Graphite

### CHINA

**MB-GRA-0036**      **Graphite spherical 99.95% C, 15 microns, fob China, \$/tonne**

Quality: 99.95% C, 15 microns, uncoated

Quantity: Min 20 tonnes

Location: fob China

Unit: USD/tonne

Publication: Weekly, Thursday by 4pm London

**MB-GRA-0042**      **Graphite flake 94% C, -100 mesh, fob China, \$/tonne**

Quality: Flake 94% C, -100 Mesh

Quantity: Min lot size: 20 tonnes

Location: fob China, FCL

Unit: US\$ per tonne

Publication: Weekly, Thursday by 4pm, London

## Nickel Sulfate

### CHINA

**MB-NI-0244**      **Nickel sulfate min 21%, max 22.5%; cobalt 10ppm max, exw China, yuan/tonne**

Quality: Nickel content min 21%, max: 22.5%; cobalt 10ppm max

Quantity: Min 1 tonne

Unit: CNY/tonne

Payment terms: Bank acceptance (other payments normalized)

Publication: Weekly, Friday 3-4pm London time

### EAST ASIA, SOUTHEAST ASIA

**MB-NI-0246**      **Nickel sulfate, cif China, Japan and South Korea, \$/tonne**

Quality: Accepted by buyer for use in battery applications with chemical composition: Ni content, base 22.3% max, min 22%, cobalt 50ppm max

Quantity: Min 1 tonne

Location: cif major ports China, Japan, Korea (other ports normalized)

Timing: Within 60 days

Unit: USD/tonne

Publication: Monthly, first working day of each month, 4pm London time

**MB-NI-0247**      **Nickel sulfate premium, cif China, Japan and South Korea, \$/tonne**

Quality: Accepted by buyer for use in battery applications with chemical composition: Ni content, base 22.3% max, min 22%, cobalt 50ppm max

Quantity: Min 1 tonne

Location: cif major ports China, Japan, and Korea, on top of monthly average LME nickel cash price

Timing: Within 60 days

Unit: USD/tonne

Publication: Monthly, first working day of each month, 4pm London time

## Scrap

### Copper scrap

#### CHINA

<b>MB-CU-0360</b>	<b>No2 copper material, RCu-2B (birch/cliff), cif China, LME/Comex discount, US cents per lb</b>
Quality:	Minimum copper content 99% with a minimum recovery rate of 94%. Clean copper tube, belt, plate, rod, wire and other shapes. Includes burned copper wires of 1.6mm and above, attachments and surface plating. Coated material should consist no more than 5% of the total mass of No 2 copper material. Particles of non-metallic contamination in the form of dust, sludge, crystalline salts, metal oxides and fiber should not exceed 2mm in diameter, and these particles should not exceed 0.1% of the total content, as defined by China's State Administration for Market Regulation.
Quantity:	Min 25 tonnes
Location:	cif Chinese ports (Shanghai, Guangdong, Zhejiang, Tianjin and Shandong)
Timing:	Within 5 weeks
Unit:	US cents/lb
Payment:	Cash against documents, letter of credit, telegraphic transfer; other terms normalized
Publication:	Monthly. Last Monday of each month 3-4pm London time

### Aluminium scrap

#### UNITED KINGDOM

<b>MB-AL-0282</b>	<b>Aluminium scrap baled old rolled, LME discount, delivered consumer UK, £/tonne</b>
Quality:	Wrought scrap of alloyed and unalloyed aluminium. Maximum 2% calcareous and other non-metallic substances
Quantity:	Min 5 tonnes
Location:	Delivered consumer works, UK
Timing:	Within 4 weeks
Unit:	GBP/tonne
Payment terms:	Net monthly account
Publication:	Weekly. Wednesday 3-4pm London time
<b>MB-AL-0007</b>	<b>Aluminium scrap cast wheels, delivered consumer UK, £/tonne</b>
Quality:	Cast aluminium wheels
Quantity:	Min 5 tonnes
Location:	Delivered consumer works, UK
Timing:	Within 4 weeks
Unit:	GBP/tonne
Payment terms:	Net monthly account
Publication:	Weekly. Wednesday 3-4pm London
<b>MB-AL-0009</b>	<b>Aluminium scrap clean HE9 extrusions, delivered consumer UK, £/tonne</b>
Quality:	Clean HE9 extrusion scrap. Cu 0.1% max, Zn 0.1% max, free from deleterious materials, oil, grease, non-metallic coatings max 1%
Quantity:	Min 5 tonnes
Location:	Delivered consumer works, UK
Timing:	Within 4 weeks
Unit:	GBP/tonne
Payment terms:	Net monthly account
Publication:	Weekly. Wednesday 3-4pm London

**MB-AL-0010 Aluminium scrap commercial cast, delivered consumer UK, £/tonne**

Quality: Whole or broken aluminium castings of all kinds

Quantity: Min 5 tonnes

Location: Delivered consumer works, UK

Timing: Within 4 weeks

Unit: GBP/tonne

Payment terms: Net monthly account

Publication: Weekly. Wednesday 3-4pm London

**MB-AL-0011 Aluminium scrap commercial pure cuttings, delivered consumer UK, £/tonne**

Quality: New, uncoated, mixed alloys, pure sheet scrap. May contain proportion of one of more aluminium alloys, none of which shall contain more than 0.1% Cu and 0.1% each of Pb, Zn, Sn, antimony, bismuth. Mg 0.5% max. No 2000 or 7000 series metal

Quantity: Min 5 tonnes

Location: Delivered consumer works, UK

Timing: Within 4 weeks

Unit: GBP/tonne

Payment terms: Net monthly account

Publication: Weekly. Wednesday 3-4pm London

**MB-AL-0012 Aluminium scrap commercial turnings, delivered consumer UK, £/tonne**

Quality: Clean, uncorroded aluminium borings, millings and turnings of two or more specified alloys. Zn 2% max, Fe fines 3% max, oil/moisture/free iron 10% max

Quantity: 5 tonnes

Location: Delivered consumer works, UK

Timing: Within 4 weeks

Unit: GBP/tonne

Payment terms: Net monthly account

Publication: Weekly. Wednesday 3-4pm London time

**MB-AL-0015 Aluminium scrap group 7 turnings, delivered consumer UK, £/tonne**

Quality: Clean, uncorroded aluminium borings, millings and turnings of two or more specified alloys. Zn 7.5% max, Fe fines 3% max, oil/moisture/free iron 10% max

Quantity: Min 5 tonnes

Location: Delivered consumer works, UK

Timing: Within 4 weeks

Unit: GBP/Tonne

Payment terms: Net monthly account

Publication: Weekly. Wednesday 3-4pm London time

**MB-AL-0014 Aluminium scrap group 1 pure 99% & litho, delivered consumer UK, £/tonne**

Quality: New, uncoated, unalloyed aluminium sheet, wire and cable scrap, not burnt or corroded, baled. Al content minimum 99.9% (oil, grease, non-metallic coatings max 1%)

Quantity: 5 tonnes

Location: Delivered consumer works, UK

Timing: Within 4 weeks

Unit: GBP/tonne

Payment terms: Net monthly account

Publication: Weekly. Wednesday 3-4pm London time

**MB-AL-0018 Aluminium scrap loose old rolled cuttings, delivered consumer UK, £/tonne**

Quality: Wrought scrap of alloyed and unalloyed aluminium. Maximum 2% calcareous and other non-metallic substances

Quantity: Min 5 tonnes

Location: Delivered consumer works, UK

Timing: Within 4 weeks

Unit: GBP/tonne

Payment terms: Net monthly account

Publication: Weekly. Wednesday 3-4pm London time

**EUROPE**


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**MB-AL-0013 Aluminium scrap floated frag, delivered consumer Europe, €/tonne**

Quality: Twitch floated fragmentiser aluminium scrap (from automobile shredders). Free Zn 1% max, free Mg 1% max, analytical Fe 1% max. Non-metallics 2% max (of which rubber & plastics 1% max)

Quantity: Min 25 tonnes

Location: Delivered consumer works, Europe

Timing: Within 4 weeks

Unit: EUR/tonne

Payment terms: 30 days, other payment terms normalized

Publication: Weekly. Friday 3-4pm London time

**MB-AL-0019 Aluminium scrap mixed turnings, delivered consumer Europe, €/tonne**

Quality: Clean, uncorroded aluminium borings, millings and turnings of two or more specified alloys. Zn 2% max. Fines 3% max, oil/moisture/free iron 10% max

Quantity: Min 25 tonnes

Location: Delivered consumer works, Europe

Timing: Within 4 weeks

Unit: EUR/tonne

Payment terms: 30 days, other payment terms normalized

Publication: Weekly. Friday 3-4pm London time

**MB-AL-0008 Aluminium scrap cast, delivered consumer Europe, €/tonne**

Quality: Whole or broken aluminium castings of all kinds. Oil and grease not to total more than 2%

Quantity: Min 25 tonnes

Location: Delivered consumer works, Europe

Timing: Within 4 weeks

Unit: EUR/tonne

Payment terms: 30 days, other payment terms normalized

Publication: Weekly. Friday 3-4pm London time

## Secondary aluminium

**EUROPE**


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**MB-AL-0005 Aluminium pressure diecasting ingot DIN226/A380, delivered Europe, €/tonne**

Quality: Ingot. Cu 2-4%, Mg 0.15-0.55%, Si 8-11%, Fe 0.6-1.1%, Mn 0.55% max, Ni 0.55% max, Zn 1.2% max, Cr 0.15% max, others each 0.05% max/total 0.25% max

Quantity: Min 25 tonnes

Location: Delivered consumer works in Europe, most consumers in Northern Europe, in particular Germany

Timing: Within 2 months

Unit: EUR/tonne

Payment terms: 30 days, other payment terms normalized

Publication: Weekly. Friday 3-4pm London time

**MB-AL-0016 Aluminium scrap LM24 pressure diecasting ingot, delivered consumer UK, £/tonne**

Quality: Ingot. Cu 3-4%, Mg 0.1% max, Si 7.5-9.5%, Fe 2% max, Mn 0.5% max, Ni 0.5% max, Zn 3% max.

Quantity: Min 5 tonnes

Location: Delivered consumer works, UK

Timing: Within 2 months

Unit: GBP/tonne

Payment terms: Net monthly account

Publication: Weekly. Wednesday 3-4pm London time

**MB-AL-0017 Aluminium scrap LM6/LM25 gravity diecasting ingot, delivered consumer UK, £/tonne**

Quality: LM6 - Cu 0.1%, Mg 0.1% max, Si 10-13%, Fe 0.06% max, Mn 0.5% max, Ni 0.1% max, Zn 0.1% max, Pb 0.1% max, Tin 0.05% max, Ti 0.2% max.  
 LM25 - Cu 0.2%, Mg 0.2-0.4%, Si 6.5-7.5% max, Fe 0.2% max, Mn 0.1% max, Zn 0.1% max

Quantity: Min 5 tonnes

Location: Delivered consumer works, UK

Timing: Within 2 months

Unit: GBP/tonne

Payment terms: Net monthly account

Publication: Weekly. Wednesday 3-4pm London time

## Titanium scrap

### EUROPE

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**MB-TI-0001 Titanium scrap turnings, unprocessed type 90/6/4, 0.5% Sn max, cif Europe, \$/lb**

Quality: Turnings. Ti 90%, Al 6%, V 4%, Sn 0.5%

Quantity: 18-22 tonne lots

Location: cif major European ports

Unit: USD/per lb Ti

Payment terms: Cash. Other terms normalized

Publication: Weekly. Wednesday 3-4pm London time

**MB-TI-0002 Titanium scrap turnings, unprocessed type 90/6/4, 0.5-2% Sn max, cif Europe, \$/lb**

Quality: Turnings. Titanium 90%, Al 6%, V 4%, Sn 0.5-2%

Quantity: 18-22 tonne lots

Location: cif major European ports

Unit: USD/per lb Ti

Payment terms: Cash. Other terms normalized

Publication: Weekly. Wednesday 3-4pm London time

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