

# Non-ferrous Metals

Methodology and price specifications – July 2025

# **F** Fastmarkets

#### **Non-ferrous Prices**

## Contents

- 3 Mission statement Introduction
- 4 Price discovery and methodology
- 9 Price specifications
  Base metals
  - 9 Alumina
  - 9 Aluminium P1020A
  - 14 Aluminium billet
  - 15 Aluminium flat-rolled products
  - 16 Aluminium foundry alloys
  - 20 Low-carbon aluminium differentials
  - 22 Copper concentrate
  - 22 Blister copper
  - 22 Refined copper
  - 27 Copper rod
  - 27 Lead concentrate
  - 28 Refined lead
  - 31 Nickel
  - 34 Tin
- 36 Zinc concentrate
- 36 Refined zinc

#### **Bulk alloys**

- 40 Ferro-chrome
- 43 Ferro-manganese
- 45 Ferro-silicon
- 46 Silico-manganese
- 46 Ferro-nickel
- 47 Nickel Pig Iron

#### Noble alloys

- 47 Molybdenum
- 48 Titanium
- 48 Tungsten
- 49 Ferro-tungsten
- 50 Vanadium
- 51 Ferro-Niobium

#### Ores

- 51 Bauxite
- 52 Chrome ore
- 52 Manganese ore
- 53 Nickel ore

#### Minor metals

- 54 Antimony
- 55 Arsenic
- 55 Bismuth
- 55 Cadmium
- 56 Chromium
- 56 Cobalt
- 58 Gallium
- 58 Germanium
- 59 Hafnium
- 59 Indium
- 59 Magnesium
- 60 Manganese
- 61 Rhenium
- 61 Selenium
- 61 Silicon
- 62 Tantalum
- 62 Tellurium

#### **Battery Raw Materials**

- 63 Cobalt sulfate
- 63 Cobalt hydroxide
- 64 Cobalt MHP
- 64 Iron phosphate
- 64 Lithium
- 68 Spodumene
- 68 Graphite
- 68 Nickel sulfate
- 69 Nickel MHP
- 70 Nickel matte
- 70 Manganese sulfate

#### Scrap

- 71 Black mass
- 76 Lithium-ion battery scrap
- 76 Copper scrap
- 77 Aluminium scrap
- 82 Secondary aluminium
- 84 Titanium scrap





# Mission statement

Fastmarkets Metals, Minerals & Mining 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 1882.

Fastmarkets Forest Products is the leading global provider of pricing intelligence for the global forest products industry.

And Fastmarkets Agriculture Products has delivered pricing transparency to opaque agriculture and energy markets in the form of market-moving reporting and commentary, trusted pricing and price forecasting since 1865.

Our mission is to meet our markets' 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' 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 price-reporting team for metals and minerals, agricultural products and forest products. We have hubs in London, Brussels, Sofia, Helsinki, Kyiv, New York, Boston, San Francisco, Eugene, Charlottesville, Atlanta, Pittsburgh, Memphis, Sao Paulo, Beijing, Shanghai, Hong Kong, Singapore, Malaysia, Melbourne, Mumbai and Istanbul.

The aim of this document is to provide a clear overview of Fastmarkets' methodology and the specifications for the prices it assesses. If you have any questions, please contact Editorial & Pricing Director for Non-Ferrous Metals & Mining Fleur Ritzema at fleur.ritzema@fastmarkets.com, Editorial & Pricing Director for Ferrous Metals & Mining Andrew Wells at andrew.wells@fastmarkets.com, Forest Products Senior VP of Indices Matt Graves at mgraves@fastmarkets.com for forest products or Editorial Director Tim Worledge at tim.worledge@fastmarkets.com for agricultural products.



# Price discovery and methodology

#### Methodology rationale

Fastmarkets produces independent, fair and representative price assessments and indices of metals and forest products prices on a daily, bi-weekly, weekly, monthly or quarterly basis. Fastmarkets' rationale for adopting the price-discovery process described in this methodology document is to produce consistent and representative indicators of value for specific markets over defined trading periods.

#### Assessment objective

The assessor's intended aim is to reflect Fastmarkets' assessment price definition:

'The prevailing level at which a commodity of stated specification has, or could be expected to have transacted over a defined period of time.'

We summarize this for effective use as the prevailing 'tradeable level' of the market.

#### Time window

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

Unless otherwise specified, the assessed timeframe will be the period since the conclusion of the previous price quotation. If, for instance, the last price assessment published by Fastmarkets 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 between Friday afternoon of the last price assessment and the following Friday afternoon. Where deemed appropriate for a particular market, Fastmarkets may specify a narrower window of time closer to the publication date where activity is given greater consideration in the price assessment, though this is stated in the specifications relating to those prices.

#### Data contribution

Fastmarkets reporters aim to collect data from a broad sample of market participants specifically involved in the buying and selling of the metal or forest product of interest, with a good representation of both sides of the market, including producers and consumers, as well as traders and intermediaries.

Data is collected from industry participants directly involved in the relevant market primarily by telephone but also by email, digital messaging, face-to-face interaction or by direct submission. All data supplied to Fastmarkets is kept confidential and stored in our secure online pricing database system MlnD (Market Information Database). Fastmarkets may sign a Data Submitter Agreement (DSA) with any data provider, if requested to do so, to maximize the number of data points collected for inclusion in the assessment process. Any data received subject to a DSA will be used in the pricing assessment but will not be commented on.

Market participants may contribute data following a review by Fastmarkets of their activities. The aim is to ensure that submitters have sufficient visibility and understanding of the market in question to be able to provide reliable price data. We expect that data submitters taking part in the pricing process are authorized to report market data on behalf of their organizations. Fastmarkets encourages organizations to submit all their pricing data, especially all the concluded transactions. Price reporters generally speak to, and collect data from, front office staff directly involved in the commercial activity of buying and selling the relevant product(s). Fastmarkets also welcomes organizations to submit transaction data from authorized back-office functions. Fastmarkets' Data Submitter Policy provides guidelines to ensure the high level of data quality and integrity we expect from contributing organizations providing pricing data. The policy can be found on Fastmarkets' website, or is available on request.

Depending on market liquidity, Fastmarkets reserves the right to also base its prices on bids, offers, deals heard and market participant indications of prevailing tradeable values or other indications such as trigger prices that might prompt a sale or purchase.



# Price specifications and reference units

Fastmarkets 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 recognized metals, minerals and forest products markets.

Fastmarkets' 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 meet these specifications. Any data that does not fall within the stated ranges of the specification will not be eligible for consideration in the assessment.

# Data analysis and producing the price assessment

#### Establishing a data hierarchy

To produce the price assessment, a consideration hierarchy is established based on an evaluation of first, the reporter's confidence in the data's reliability, and second, the significance of the data.

The confidence level, or trustworthiness, of a data point is generally based on the transparency of the activity, whether it was reported by a party directly involved or was 'heard' activity, corroboration by other market participants and the level of detail provided by the data submitter, although there may be other contributory factors.

For indications of tradeable levels or other indication of willingness to sell or purchase, confidence may be determined based on the justification provided by the submitter, their visibility and activity level in the market, and their prior reliability. Factors that Fastmarkets may consider during times of low liquidity include, but are not limited to: market fundamentals such as changes in inventory levels, shipments, operating rates and export volumes; relative fundamentals of similar commodities in the same region; relative values of the same commodity in different regions; and changes in the value of the commodity's primary feedstock(s) or primary derived product(s).

The significance of a data point is determined based on its effectiveness in identifying the tradeable level of the market under assessment. Transactions are considered highest in the significance hierarchy, 'tight' bids/offers are of secondary importance, followed by data sources' own indications of a tradeable level when they have no business to report. Tight bids/offers are typically defined as those being within the range of transaction and/or indication data points, thereby helping narrow our assessment of the tradeable range. More speculative bids/offers, outside of the range of other data, would typically be of lowest significance. In some circumstances, firm bids higher than transactions or offers lower than transactions may be considered of high significance if deemed to demonstrate a clear directional change in market floor or ceiling levels.

The published assessment will typically be reflective of the highest-confidence and highest-significance data collected in that pricing session. In pricing sessions with little or no data of sufficient quality, extra caution will be applied and reporters may exercise their judgment to keep a price assessment unchanged as a fallback until activity can be confirmed with greater certainty.

All Fastmarkets 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 may typically be considered more significant than a smaller-volume transaction. But price reporters will also consider, for instance, normalizing or discarding a reported deal where it is suspected an abnormally large or small volume may have unduly distorted its price.

Fastmarkets will also compare the information received from a single source with the information provided by the same source in the previous pricing cycle. This way, if a source consistently gives lower or higher indications than the consensus, Fastmarkets can still use the data for directional context without it unduly influencing the assessment.

#### **Normalization**

Where necessary in certain assessments, data that falls within the stated specification ranges for consideration may be normalized to determine the equivalent price for the respective base specification if one exists. This may include, for instance, variances in material type or quality, delivery terms of location, payment terms or cargo size.

Data may be normalized to the base specification using either a statistical or judgement based method. Where



patterns can be established over time, such as for price differences between product qualities, data may be normalized using in-house developed models based on regression analysis of collected data. The analysis allows Fastmarkets to capture the value-in-use applied by the market to different qualities or terms and to normalize to a single base specification. Where a statistically derived adjustment factor is not possible for a particular variable, editorial judgment may be applied to normalize prices using third party data (such as broker rates for freight adjustments or exchange prices for QP adjustments), or by surveying market participants for an appropriate adjustment.

Where prices cannot be normalized with sufficient confidence or precision, such data may be discarded from the assessment. Fastmarkets' aim is to balance the requirement to keep assessments reflective of their base specifications with the need to source a sufficiently robust data set for consideration.

#### Minimum data threshold

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.

In each pricing session, reporters aim to source data from a suitably diverse set of market participants. In the unlikely situation that more than half of the pricing data collected in a session is provided by a single source, the assessor may refer to data collected in the previous pricing session to avoid a dependency on a single entity providing an unacceptably significant (50% or more) proportion of data. In markets where, to satisfy their jurisdictional antitrust guidelines, certain companies require us to adhere to a maximum of 25% data concentration from a single entity, Fastmarkets will comply with this stricter threshold.

# Criteria for discarding pricing data and the removal of outliers

Fastmarkets price assessments are intended to reflect the 'open and competitive' market level. Reporters therefore may apply expert judgment to exclude data deemed unrepresentative, questionable or unreliable prior to consideration in the final assessment. Data that falls outside of the respective assessment specifications, or which cannot be normalized to a base specification with sufficient confidence, is also discarded. Decisions to discard data points are recorded in the form of a written rationale in our internal pricing database, where they are reviewed and approved under the two-tier peer review process.

Data may be discarded as outliers based on the identification of external factors that may be distorting the price. Price-affecting side terms, inconsistencies in information reported, or suspected motivation to unfairly influence the price discovery process would typically be grounds for removal of data, as would activity not considered to have taken place at 'arm's length'. Outliers will be investigated; more detail may be requested to determine possible reasons behind an anomalous price, and efforts will be made to identify the counterparty to cross-verify information. Suspected attempts to influence the assessment unfairly may result in the data provider being warned or excluded. Fastmarkets reserves the right to see contracts and signed paperwork before inclusion of the data in the assessment. If this is refused, the data supplied may be excluded from the assessment process.

Fastmarkets follows international sanctions regarding the suspension of brands from its price reporting process.

This means that if exchanges or jurisdictions decide to ban or restrict trade in a brand or with a particular country of origin without any international sanctions being imposed, Fastmarkets will continue to accept the material in the price reporting process.

# Data publication

#### Peer review process

All Fastmarkets' price assessments are set by a first reporter who covers that specific market, peer reviewed by a second reporter, and always signed-off by a senior reporter or editor prior to publication. This peer review process, which takes place in Fastmarkets' MInD system and is fully auditable, is in place to make sure that pricing procedures and methodologies are correctly and consistently applied and to ensure integrity and quality of the published prices. Relevant information, including all price inputs and editorial judgements, are securely retained in MInD for at least five years to maintain a full audit trail. Price reporters are formally trained in the price discovery process and must abide by a written Code of Conduct and Pricing Procedures.

For certain prices Fastmarkets also publishes pricing rationales to explain the assessment, describing why a particular price or range was determined based on the market information collected. These notes explain for instance whether any data has been excluded and why, information on the data collected and whether fallback procedures have been applied.



#### **Publication**

At the end of the peer review process, Fastmarkets MB and AMM publish their price assessments via MInD and on the Fastmarkets Dashboard and on product-specific websites and in the Price Book. Fastmarkets RISI, FOEX and Random Lengths publish their price assessments on the Intelligence Center, mobile app and in dedicated newsletters.

Most Fastmarkets assessments (aside from a small number of single-figure assessments) are quoted as ranges reflecting Fastmarkets' evaluation of the market's prevailing tradeable level over the observation window.

To enhance market transparency and to provide evidence of data inputs that support the price discovery process, Fastmarkets may publish trade logs in accordance with industry demand (while maintaining full counterparty confidentiality) detailing pricing data and volumes received from data contributors. Prices that have undergone an IOSCO assurance review will be published with a concise, written rationale on how the price was set.

Fastmarkets' price assessments are published at the time and frequency stated under each individual specification. The pricing schedules vary according to markets and locations in which they are assessed. For more details on the pricing holiday calendar and alternative pricing dates for each assessment or index, refer to Fastmarkets' Pricing Holidays schedule on Fastmarkets.com or on the RISI, FOEX and Random Lengths websites.

#### Corrections and delays

If an assessment is published incorrectly, it will be rectified and republished as soon as possible. A pricing notice explaining the reasons for the correction will also be published promptly.

Fastmarkets uses several procedures and measures to avoid delays in the publication of its assessments. In the event of a delay, however, Fastmarkets will inform subscribers as soon as possible.

In the event of late publication, only data that has been received within the correct standard timeframe will be included in the assessment. No assessment will be amended due to the emergence of new data or market activity after the initial publication. Retrospective changes to the published values will only be made in cases of technical, administrative or interpretation error in line with **Fastmarkets' Correction Policy**.

# Methodology and price specification review process

#### Methodology review and pricing notices

Fastmarkets aims to continually develop and periodically review its methodologies in consultation with industry participants, with the objective to adopt product specifications, trading terms and conditions that reflect and are representative of typical working practices in the industries it serves.

Fastmarkets carries out a formal review and approval of its methodology and price specifications on an annual basis. The process is initiated by Fastmarkets publishing on its website an open consultation at least one month (or around 20 working days) before the annual methodology review is due, inviting market feedback over the duration of that period. The timeframe for the consultation and method of submission are both clearly stated.

Following a review of market participants' feedback, comments and suggestions, Fastmarkets concludes the consultation by publishing a notice stating whether or not any methodology changes are proposed. If suggested, changes are classified either as 'material' or 'immaterial'. Material changes are those that, once implemented, may result in fundamental changes to the published price. These include specification changes or structural changes to assessments. Immaterial changes are those that will not result in a different price level once they are implemented.

If a material change to the methodology is required, Fastmarkets includes in its pricing notice: the outline of the proposed change; the rationale or motivation for proposing such a change; and a proposed timetable for the date on which, if the change goes ahead, it would be implemented. If received feedback is considered insufficient to support a material change, Fastmarkets publishes a new notice extending the consultation and inviting comments on the new proposal.

A record of the methodology review is sent to the Risk & Compliance team. All comments received from the market are assumed to be confidential and are treated as such unless stated otherwise.

When Fastmarkets proposes a change to the methodology, it should be understood that no decision has yet been made and that the proposal to make a





change should not automatically be understood as confirmation that the change will happen.

For prices subject to EU Benchmark Regulation (BMR), any change to the methodology requires approval from the Managing Director of our benchmark administrator, Fastmarkets Benchmark Administration Oy.

Outside of the formal methodology review process, editors may from time to time suggest changes or additions to reflect market developments. As with the formal review, changes to the existing methodology will either be classed as 'material' or 'immaterial'. The process for implementing the change will be the same as outlined above for formal reviews. The minimum duration of one month (or around 20 working days) for the consultation process normally provides market participants sufficient opportunity to analyze and comment on the impact of the proposed change.

For more details on the formal review of the methodology and the consultation process to propose changes to the methodology, refer to Fastmarkets'

Methodology Review and Change Consultation Process available on the Fastmarkets website.

# Queries and complaints

Fastmarkets encourages engagement from the market on its pricing principles and methodology. The company promotes understanding of its pricing procedures and is committed to responding to requests for further information and clarification on a timely basis.

There are multiple channels for interaction with the pricing team including email, telephone and instant messenger services.

If a subscriber has an issue with the published prices, then they may contact the pricing team. In the event that the response is not satisfactory the issue may be escalated to the internal compliance department. For more details refer to Fastmarkets' **Complaint Handling Policy** available on Fastmarkets' website.

Fastmarkets takes all queries and complaints seriously and will seek to provide an explanation of the prices wherever possible. It is important to note, however, that input data remain confidential and cannot be provided to third parties.

# Become a contributor to the price discovery process

Fastmarkets continually seeks to increase the number of market sources willing to take part in the price discovery process. The main condition Fastmarkets requires from contributors is for them to be active participants in the relevant market being priced.

Fastmarkets' Data Submitter Policy provides guidelines defining the high level of data quality and integrity that Fastmarkets expects from contributing organizations providing pricing data. Market participants that wish to provide pricing data and be part of the price discovery process should first read the Data Submitter Policy available on the Fastmarkets website. The Policy is communicated to all data submitters at least on an annual basis.

All data sources are subject to review before their data submitted is fully taken into account in the pricing process. Our Contributor Approval Policy (CAP) requires this review or probation period to last no more than three months. The aim is to make sure that submitters are trustworthy and have sufficient visibility and understanding of the market to be able to provide viable price data.

# 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 does not redistribute exchange-proprietary prices as part of Fastmarkets prices. Users do not require an LME market-data licence to view or circulate this index.



# Base metals

# **Alumina**

#### **CHINA**

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 time

#### **AUSTRALIA**

MB-ALU-0002 Alumina index, fob Australia,

\$/tonne

Quality: Smelter-grade alumina, minimum

purity of 98.5% Al2O3

Quantity: 5,000 tonnes

Location: fob Bunbury/Kwinana,

Australia(other Pacific origins

normalized)
Within 2 months

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

August 2010. Full methodology

available here.

#### **BRAZIL**

MB-ALU-0003 Alumina index adjustment to fob

Australia index, Brazil, \$/dmt

Quality: Smelter-grade alumina, minimum

purity of 98.5% Al2O3

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: Weekly. Thursday, 4pm London time

Notes Bulk carrier Full methodology

available here.

MB-ALU-0010 Alumina index inferred, fob Brazil,

\$/dmt

Quality: Smelter grade alumina, minimum

purity of 98.5% Al203

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 **here**.

## **Bauxite**

Please see Ores section.

# Aluminium P1020A

#### **JAPAN**

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

Note: Full methodology available here.



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 exchange-listed

aluminium price

Timing: Within two calendar months

Unit: USD/tonne

Payment terms: Cash against documents (2 days

after Bill of lading date)

Daily by 4pm London time

Publication: Daily by 4pm London time Notes: Excluding metal from LME

warehouses and metal subject to international sanctions. Assessed by Fastmarkets' Singapore office. Full methodology available **here**.

**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: Fortnightly, Tuesday 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) Ingot

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: Fortnightly, Tuesday 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

**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 exchange-listed

aluminium 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 Note: Full methodology available **here**.

**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: Fortnightly. Weds 3-4pm 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 exchange-listed

aluminium price

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 time

Note: Full methodology available **here**.

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: Fortnightly. Weds 3-4pm London time

MB-Al-0384 Aluminium P1020A Rotterdam premium P0610 netback rate

Quality: P0610 ingot

Location: In-warehouse Rotterdam, netback to

aluminium P1020A premium in-whs

dup/dp Rotterdam

Unit: USD/tonne

Publication: Monthly, first working day of the

month, 3-4pm London time Published as a single number

Aluminium primary ingot premium, in-whs dp Rotterdam,

inferred P0610 midpoint, \$/tonne

www.fastmarkets.com 11

Note:

MB-AL-0386



MB-AL-0385	Aluminium primary ingot	UNITED STATES	
	premium, in-whs dup Rotterdam, inferred P0610 midpoint, \$/tonne	MB-AL-0338	Aluminium P1020A warrant premium, in-whs US, \$/tonne
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, T-bar, sow
Quality:	P1020A or 99.7 % Minimum Al purity (Si 0.10% max, Fe 0.20% max). Ingot	Quantity: Location:	Min 25 tonnes In any LME-approved warehouse in
Quantity: Location:	Min 100 tonnes Free-carrier duty-paid Italy (north and south of country), premium on top of		the USA (10 delivery points in June 2017), premium on top of LME cash prices
Timing:	exchange-listed aluminium price Within 4 weeks	Timing: Unit:	Prompt Release USD per tonne
Unit: Payment terms:	USD/tonne Cash against documents (7 days after bill of lading date); other terms	Payment terms:	Cash against documents (7 days after bill of lading date); other terms normalized
Publication: Note:	normalized Weekly. Tuesday 3-4pm London time Full methodology available here.	Publication:	Fortnightly. Weds 3-4pm London time
	O,	MB-AL-0020	Aluminium P1020A premium, ddp Midwest US, cents/lb
MB-AL-0319	Aluminium P1020A premium, fca dp Spain, \$/tonne	Quality:	P1020A or 99.7% minimum Al purity (silicon 0.10% max, iron 0.20%
Quality:	P1020A or 99.7 % Minimum Al purity (Si 0.10% max, Fe 0.20% max). Ingot		max, zinc 0.03%, gallium 0.04%, vanadium 0.03%). Ingot, T-bar, Sow.
Quantity:	Min 100 tonnes	Quantity:	Min 100 tonnes
Location: Timing:	free-carrier duty-paid Spain, premium on top of LME cash prices Within 4 weeks	Location:	Delivered consumer works Midwest, premium on top of exchange-listed aluminium price
Unit:	USD/tonne	Unit:	US cents per pound
Payment terms:	Cash against documents (7 days after bill of lading date); other terms normalized	Timing Payment terms:	Within four weeks 30 days, other payment terms normalized
Publication:	Once every two weeks. Tuesday 3-4pm London time	Publication: Note:	Daily. 3-4pm London time Full methodology available <b>here</b> .
TURKEY		MB-AL-0231	Aluminium P1020A all-in price,
MB-AL-0337	Aluminium P1020A premium, cif		LME-based, delivered Midwest US, US cents/lb
Quality:	dup Turkey, \$/tonne P1020A or 99.7 % Minimum Al purity (Si 0.10% max, Fe 0.20% max). Ingot	Quality:	London Metal Exchange specification P1020A or 99.7% minimum Al purity (silicon 0.10% max, iron 0.20%
Quantity: Location:	Min 100 tonnes CIF duty-unpaid Turkey (Marmara		max, zinc 0.03%, gallium 0.04%,
Location:	region), premium on top of LME cash prices	Location: Unit:	vanadium 0.03%) Delivered consumer works Midwest US cents per pound
Timing:	Within 4 weeks	Quantity:	100 tonnes
Unit: Payment terms:	USD/tonne Cash against documents (7 days after bill of lading date); other terms	Publication: Notes:	Daily London Metal Exchange cash aluminium AM bid price plus
Publication:	normalized Once every two weeks. Tuesday, 3-4pm London time		Fastmarkets Midwest aluminium premium



MEXICO		MB-AL-0394	Aluminium P1020A premium, low-VAT market, delivered
MB-AL-0407	Aluminium P1020A premium, cif Mexico, \$ per tonne	Quality:	São Paulo region, \$/tonne P1020A or 99.7% minimum Al purity
Quality:	P1020A or 99.7% minimum Al purity	addity.	(Si 0.10% max, Fe 0.20% max) ingot
,	(Si 0.10% max, Fe 0.20% max). Ingot,	Quantity:	Min 100 tonnes
	T-bar, sow	Location:	Delivered in São Paulo region with up
Quantity:	Min 100 tonnes		to 4% ICMS state tax, duty-paid, VAT
Location:	CIF Mexico main ports Veracruz, Altamira or Manzanillo (other ports		removed, premium on top of LME cash prices
	normalized); premium on top of LME	Timing:	Within 4 weeks
	exchange-listed aluminium price	Unit:	USD/tonne
Unit:	USD per tonne	Payment terms:	Cash against documents (7 days
Timing:	Any transaction data concluded		after bill of lading date); other
_	within 4 weeks		payment terms normalized
Payment terms:	Cash against documents (within 7	Publication:	Once every two weeks. Tuesday,
	days after bill of lading date), other payment terms normalized		3-4pm London time
Publication:	Fortnightly, Tuesday, 3-4pm London		
	time	MB-AL-0395	Aluminium P1020A premium,
			high-VAT market, delivered
			São Paulo region, \$/tonne
BRAZIL		Quality:	P1020A or 99.7% minimum Al purity
MB-AL-0022	Aluminium P1020A premium, cif	Quantity:	(Si 0.10% max, Fe 0.20% max) ingot Min 100 tonnes
MD-AL-0022	dup Brazilian main ports, \$/tonne	Location:	Delivered in São Paulo region with
Quality:	P1020A or 99.7 % Minimum Al purity		12% ICMS state tax, duty-paid, VAT
,	(Si 0.10% max, Fe 0.20% max). Ingot,		removed, premium on top of LME
	T-bar, sow		cash prices
Quantity:	Min 100 tonnes	Timing:	Within 4 weeks
Location:	cif Brazil ports duty unpaid, excluding	Unit:	USD/tonne
Timing:	VAT, premium on top of LME cash prices Within 30-60 days	Payment terms:	Cash against documents (7 days after bill of lading date); other
Unit:	USD/tonne		payment terms normalized
Payment terms:	Cash against documents (7 days	Publication:	Once every two weeks. Tuesday,
	after bill of lading date), other		3-4pm London time
	payment terms normalized		
Publication:	Last Tuesday of each month,		
Notes:	3-4pm London time All origins except China		
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# Aluminium billet

EUROPE

MB-AL-0002 Aluminium 6063 extrusion billet premium, in-whs dp Rotterdam,

\$/tonne

Aluminium Assn specification AA6063: Quality:

> 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

Within 3 months Timing: 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

Extrusion billet AA6063: Si 0.2-0.6% Quality:

> 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"

Min 100 tonnes

Quantity: Location:

Delivered in North Germany (Ruhr

region) duty-paid premium on top of

LME cash price

Timing: Within 3 months Unit: USD/tonne

Payment terms: 30-day payment terms, other

payment terms normalized

Publication: Weekly. Friday 3-4pm London time Note: Full methodology available here.

MB-AL-0299 Aluminium 6063 extrusion billet premium, ddp Spain, \$/tonne

Extrusion billet AA6063. Billet with Quality:

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 3 months USD/tonne Unit:

60-day payment, other payments Payment terms:

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: 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"

Min 100 tonnes

Location: Delivered in Italy (Brescia region)

duty-paid premium on top of LME

cash price

Timing: Within 3 months Unit:

Quantity:

USD/tonne

Payment terms: 30-day payment terms, other

payment terms normalized

Publication: Weekly. Friday 3-4pm London time Note:

Full methodology available here.



#### **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 a month. Fourth Friday of the

month, 3-4pm London time

#### **SOUTHEAST ASIA**

**JAPAN** 

MB-AL-0297 Aluminium 6063 extrusion billet

premium, cif Thailand, \$/tonne

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

#### **MEXICO**

MB-AL-0406 Aluminium 6063 extrusion billet premium, cif Mexico, \$ per tonne

Quality: Extrusion billet AA6063. Billet with

diameter of 7in, 8in, 9in and 10in

Quantity: Min 100 tonnes

Location: CIF Mexico main ports Veracruz,

Altamira or Manzanillo (other ports normalized); premium on top of LME exchange-listed aluminium price

Unit: USD per tonne

Timing: Any transaction data concluded

within 3 months

Payment terms: Cash against documents (within 7

days after bill of lading date), other

payment terms normalized

Publication: Fortnightly, Tuesday, 3-4pm London

time

MB-AL-0298 Aluminium 6063 extrusion

quarterly billet premium, cif MJP,

\$/tonne

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



#### TURKEY

MB-AL-0296 Aluminium 6063 extrusion billet

premium, cif Turkey (Marmara

region), \$/tonne

Quality: Extrusion billet AA6063. Billet with

diameter of 6", 7" and 8"

Quantity: 100 tonnes

Location: cif Turkey (Marmara region), duty

unpaid premium on top of LME cash

prices

Timing: Within 3 months Unit: USD/tonne

Payment terms: Cash, other payments terms

normalized

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

London time

#### **BRAZIL**

MB-AL-0287 Aluminium 6063 & 6060 extrusion

billet premium, cif Brazilian main

ports, \$/tonne

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

# Secondary Aluminium Billet

#### **EUROPE**

MB-AL-0383 Secondary aluminium billet

premium, ddp Europe

Quality: Max 30% primary aluminium, min

20% recovered post-consumer

aluminium scrap

Quantity: Minimum 100 tonnes

Location: Delivered duty-paid Europe, premium

on top of LME cash price

Timing: Within 3 months
Unit: USD per tonne
Payment terms: 30 days after loading

(other payment terms normalized)

Publication: Monthly, first Friday of the month,

3-4pm London time

Notes: All types of aluminium scrap

included. Other scrap-to-primary

ratios normalized.

# Aluminium foundry alloys

#### **EUROPE**

MB-AL-0339 Aluminium foundry alloy silicon 7

ingot premium, ddp Germany, \$/

tonne

Quality: Primary Foundry Alloy silicon 7

 $\label{eq:AlSi7Mg0.3-0.6} AlSi7Mg0.3-0.6 \ for \ wheel \ production.$ 

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: Twice monthly. Second and last

Friday of the month between 3pm

and 4pm London time



LME cash prices

Within 2 months

7-30 day payment, other terms

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

US cents /lb

normalized

MB-AL-0340	Aluminium primary foundry alloy silicon 7 ingot premium, ddp	MB-AL-0349	Aluminium primary foundry alloy silicon 7 ingot annual premium,
	Eastern Europe, \$/tonne		cif MJP, \$/tonne
Quality:	Primary Foundry Alloy silicon 7	Quality:	Primary Foundry Alloy silicon 7
	AlSi7Mg0.3-0.6 for wheel production.		A356.2 for wheel production
	Ingot	Quantity:	Min 500 tonnes
Quantity:	Min 100 tonnes	Location:	cif in main Japanese ports at
Location:	Delivered in Eastern Europe (Poland,		Yokohama, Nagoya and Osaka,
	Slovakia, Austria, Hungary, Czech		duty-unpaid premium on top of
	Republic), duty-paid premium on top		P1020 ingot premium and LME cash
	of LME cash prices		prices
Timing:	Within 2 months	Timing:	Within 4 weeks
Unit:	USD/tonne	Unit:	USD per tonne
Payment terms:	30-day payment terms, other	Payment terms:	Letter of Credit or Telegraphic
	payments terms normalized		Transfer, other payments terms
Publication:	Twice monthly. Second and last		normalized
	Friday of the month between 3pm	Publication:	Annual. After deals for long-term
	and 4pm London time		contracts are completed between
			major Japanese buyers and
FACT ACIA			international producers and traders
EAST ASIA			with negotiations starting in October through to December
MB-AL-0348	Aluminium primary foundry alloy		
	silicon 7 ingot annual premium,		
	cif main South Korean ports,	UNITED STATES	
	\$/tonne		
Quantity:	Min 500 tonnes	MB-AL-0342	Aluminium primary foundry alloy
Quality:	Primary Foundry Alloy silicon 7		silicon 7 ingot/T-bar premium dlvd
	A356.2 for wheel production		dup over P1020A Midwest US, US
Location:	cif in main South Korean ports at		cents/lb
	Busan, Gwangyang and Incheon,	Quality:	Primary Foundry Alloy silicon 7
	duty-unpaid premium on top of		A356.2 for wheel production. Ingot or
	P1020 ingot premium and LME cash		T-bar
	prices	Quantity:	Min 100 tonnes
Timing:	Within 4 weeks	Location:	Delivered in US Midwest region,
Unit:	USD per tonne		duty-unpaid premium on top of
Payment terms:	Letter of Credit or Telegraphic		P1020A ingot Midwest premium and

www.fastmarkets.com 17

Timing:

Payment terms:

Publication:

Unit:

Transfer, other payments terms

Annual. After deals for long-term

contracts completed between

major South Korean buyers and

through to December

international producers and traders

with negotiations starting in October

normalized

Publication:



MB-AL-0277	Aluminum alloy C355.2 ingot, delivered, \$/lb	MB-AL-0046	Aluminum 6063 alloyed ingot, US cents/lb
Quality:	Silicon 4.50-5.50%, iron 0.13%, copper 1.00-1.50%, manganese 0.05%, magnesium 0.50-0.60%, zinc 0.05%, titanium 0.20%, aluminium	Quality:	Aluminium 99.45%, silicon 0.20-0.60%, iron 0.35%, copper 0.10%, manganese 0.10%, magnesium 0.45-0.90%, chromium 0.10%, zinc 0.10%,
	remainder		titanium 0.10%
Location:	Delivered. Domestic producer	Quantity:	20 tons
	estimated price.	Location:	Delivered
Unit:	US dollars per pound	Unit:	US cents per pound
Quantity:	20 tons	Publication:	Monthly
Publication:	Daily		
Formula:	Calculated. Formula: LME cash	N/D AL 0040	
	aluminium official price (ask) + Fastmarkets AMM Midwest	MB-AL-0040	Aluminum alloy A380.1, delivered Midwest, US cents/lb
	aluminium premium (average) +	Quality:	Copper 3.00-4.00%, iron 1.00%,
	Fastmarkets AMM alloy surcharge assessment.		magnesium 0.10%, manganese 0.50%, nickel 0.50%, silicon 7.50-9.50%, tin 0.35%, zinc 2.90%, aluminium remainder. Form: Ingot
MB-AL-0276	Aluminum alloy A356.2 ingot,	Location:	Delivered Midwest
	delivered, \$/lb	Unit:	US cents per pound
Quality:	Silicon 6.50-7.50%, iron 0.12%,	Quantity:	Truckload/20 tons
,	copper 0.10%, manganese 0.05%,	Payment terms:	Net 30 days post delivery
	magnesium 0.30-0.45%, zinc 0.05%, titanium 0.20%, aluminium remainder	Publication:	Weekly, Thursday
Location:	Delivered. Domestic producer estimated price.	MB-AL-0041	Aluminum alloy 319.1, delivered Midwest, cents/lb
Unit:	US dollars per pound	Quality:	Copper 3.00-4.00%, iron 0.80%,
Quantity:	20 tons	,	magnesium 0.10% , manganese
Publication:	Daily		0.50%, nickel 0.35%, silicon 5.50-
Formula:	LME cash aluminium official price		6.50%, titanium 0.25%, zinc 1.00%
	(ask) + Fastmarkets AMM Midwest	Location:	Delivered Midwest
	aluminium premium (average) +	Unit:	US cents per pound
	Fastmarkets AMM alloy surcharge	Quantity:	20 tons
	assessment.	Publication:	Weekly, Thursday
MB-AL-0045	Aluminum 6061 alloyed ingot, US cents/lb	MB-AL-0042	Aluminum alloy 356.1, delivered Midwest, cents/lb
Quality:	Aluminium 99.45%, silicon 0.40- 0.80%, iron 0.70%, copper 0.15-0.40%, manganese 0.15%, magnesium 0.80-1.20%, chromium	Quality:	Copper 0.25%, iron 0.50%, magnesium 0.25-0.45%, manganese 0.50%, silicon 6.50-7.50%, titanium 0.25%, zinc 0.35%
	0.15-0.35%, zinc 0.25%, titanium	Quantity:	min 20 tons
	0.15%	Location:	Delivered Midwest
Location:	Delivered. Domestic producer	Unit:	US cents per pound
	estimated price.	Publication:	Weekly, Thursday
Unit:	US cents per pound		
Quantity:	20 tons		
Publication:	Monthly		



MB-AL-0043 Aluminum alloy A360.1, delivered

Midwest, cents/lb

Copper 0.60%, iron 1.00%, Quality:

> magnesium 0.45-0.60%, manganese 0.35%, nickel 0.50%, silicon 9.0-

10.0%, tin 0.15%, zinc 0.40%

Min 20 tons Quantity:

Location: Delivered Midwest Unit: US cents per pound

Publication: Weekly, Thursday

MB-AL-0044 Aluminum alloy A413.1, delivered

Midwest, cents/lb

Copper 1.00%, iron 1.00%, Quality:

> magnesium 0.10%, manganese 0.35%, nickel 0.50%, silicon 11.0-13.0%, tin 0.15%, zinc 0.40%

Quantity: Min 20 tons Location: Delivered Midwest

US cents per pound Publication: Weekly, Thursday

**MEXICO** 

Unit:

Aluminium alloy A380.1, delivered MB-AL-0421

to consumer Monterrey, Mexico,

pesos/lb

Quality: Copper 3.00-4.00%, iron 1.00%,

> magnesium 0.10%, manganese 0.50%, nickel 0.50%, silicon 7.50-9.50%, tin 0.35%, zinc 2.90%,

aluminium remainder.

Form: Ingot

Quantity: Truckload, 20 - 25 tonnes (44,000-

55,000 lbs approx.)

Location: Delivered to consumer, Monterrey,

Mexico

Unit: Mexican pesos per pound

Publication: Weekly, Monday, 2-3pm New York

Notes: 16% VAT withholding inclusive

assessment

MB-AL-0422 Aluminium alloy A356.1, delivered to consumer Monterrey, Mexico,

pesos/lb

Copper 0.25%, iron 0.50%, Quality:

> magnesium 0.25-0.45%, manganese 0.50%, silicon 6.50-7.50%, titanium

0.25%, zinc 0.35%

Truckload, 20 - 25 tonnes (44,000-Quantity:

55,000 lbs approx.)

Location: Delivered to consumer, Monterrey,

Mexico

Unit: Mexican pesos per pound

Publication: Weekly, Monday, 2-3pm New York

Notes: 16% VAT withholding inclusive

assessment



# Low-carbon aluminium differentials

#### **EAST ASIA**

MB-AL-0393 Aluminium low-carbon differential

P1020A, Japan, South Korea,

\$/tonne

Carbon limit: 4tCO2e 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,

T-bar, sow

Quantity: Min 100 tonnes Location: Japan & South Korea

Unit: USD/tonne

Timing: Within three months

Publication: Monthly, first Friday of the month,

4pm London time

MB-AL-0382 Alumini

Aluminium low-carbon differential value added product, Europe,

\$/tonne

Carbon limit: 4tCO2e 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 time

Note: Full methodology available **here.** This

differential is to be discontinued with the last publishing date on Friday March 1, 2024 following the launch of

MB-AL-0391 and MB-AL-0392

#### EUROPE

MB-AL-0381 Aluminium low-carbon differential

P1020A, Europe, \$/tonne

Carbon limit: 4tCO2e per tonne of aluminium

produced, Scope 1 and 2 emissions P1020A or 99.7% minimum Al purity

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: Up to 18 months

Publication: Monthly, first Friday of the month,

4pm London time

Note: Includes spot and contract liquidity

Full methodology available **here** 

MB-AL-0391

Aluminium low-carbon differential

billet, Europe, \$/tonne

Carbon limit: 4tCO2e per tonne of aluminium

produced, Scope 1 and Scope 2

emissions.

Type: Extrusion billet

Quantity: Minimum 100 tonnes

Location: Europe
Unit: USD/tonne

Timing: Within three months

Publication: Monthly, first Friday of the month,

4pm London

Note: Does not include other value-added

products

MB-AL-0392

Aluminium low-carbon differential

value-added product ex-billet,

Europe, \$/tonne

Carbon limit: 4tCO2e per tonne of aluminium

produced, Scope 1 and Scope 2

emissions.

Type: Primary foundry alloy, wire rod and

slab

Quantity: Minimum 100 tonnes

Location: Europe
Unit: USD/tonne
Timing: Within 12 months

Publication: Monthly, first Friday of the month,

4pm London

Note: Does not include aluminium billet



UNITED STATES	MEXICO

MB-AL-0389 Aluminium low-carbon differential MB-AL-0408 Aluminium low-carbon differential P1020A, US Midwest, US cents/lb P1020A, cif Mexico, \$ per tonne

Carbon limit: 4tCO2e per tonne of aluminium Carbon limit: 4tCO2e per tonne of aluminium

produced, Scope 1 and 2 emissions.

Quality: P1020A or 99.7% minimum Al purity Quality: P1020A or 99.7% minimum Al purity

(Si 0.10% max, Fe 0.20% max). Ingot, (Si 0.10% max, Fe 0.20% max). Ingot,

T-bar, sow

Quantity: Min 100 tonnes

Quantity: Min 100 tonnes

Location: Delivered consumer works Midwest, Location: CIF Mexico main ports Veracruz,

differential on top of P1020A Altamira or Manzanillo (other ports premium and exchange-listed normalized); differential on top of aluminum price. P1020A premium and LME exchange-

Unit: US cents per pound listed aluminium price
Timing: Up to 18 months Unit: USD per tonne

Publication: Monthly. First Friday of the month. Timing: Any transaction data concluded

3-4pm London time within 18 months

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

MB-AL-0390 Aluminium low-carbon differential value-added product, US Midwest,

US cents/lb
Carbon limit: 4tCO2e per tonne of aluminium

produced, Scope 1 and 2 emissions.

Type: Extrusion billet, primary foundry

alloy, wire rod, slab

Quantity: Min 100 tonnes

Location: Delivered into US Midwest region,

differential on top of value-added product premium and exchange-

listed aluminum price

Unit: US cents per pound Timing: Up to 18 months

Publication: Monthly. First Friday of the month.

3-4pm London time



# Copper concentrate Blister copper

#### **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**.

**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
Note: Exchange deliverable units



MB-CU-0383	Copper grade A cathode ER premium, bonded in-whs	MB-CU-0403	Copper grade A cathode premium, cif Shanghai, \$/tonne
	Shanghai, \$/tonne	Quality:	Grade A cathode 99.9935%
Quality:	Electro-Refined Grade A cathode 99.9935% min conforming to LME specifications BS EN 1978:1998 (Cu-	,	min copper conforming to LME specifications BS EN 1978:1998 – Cu CATH-1
	CATH-1).	Quantity:	Min 25 tonnes
Quantity:	Min 25 tonnes	Location:	CIF Shanghai port, duty-unpaid
Location:	In-warehouse Shanghai port, duty-	<b>T</b>	premium on top of LME cash prices
	unpaid premium on top of LME cash	Timing: Unit:	Within 6 weeks
Ting in au	prices Within 6 weeks		USD/tonne
Timing: Unit:	USD/tonne	Payment terms:	Letter of credit, telegraphic transfer or documents against payment,
Payment terms:	Letter of credit, telegraphic transfer		other payment terms normalized
r dyrrient terms.	or documents against payment,	Publication:	Daily. 3-4pm London time
	other payment terms normalized	Notes:	Full methodology available here.
Publication:	Daily. 3-4pm London time		Exchange deliverable units
Note:	Exchange deliverable units		<b>C</b>
		MB-CU-0380	Copper grade A cathode ER
MB-CU-0382	Copper grade A cathode SX-		premium, cif Shanghai, \$/tonne
	EW premium, bonded in-whs	Quality:	Electro-Refined Grade A
	Shanghai, \$/tonne		99.9935% min conforming to LME
Quality:	Solvent Extraction-Electro winning		specifications BS EN 1978:1998 (Cu-
	Grade A cathode 99.9935% min		CATH-1)
	conforming to LME specifications BS EN 1978:1998 (Cu-CATH-1)	Quantity: Location:	Min 25 tonnes CIF Shanghai port, duty-unpaid
Quantity:	25 tonnes	Location.	premium on top of LME cash prices
Location:	In-warehouse Shanghai port, duty-	Timing:	Within 6 weeks
Location.	unpaid premium on top of LME cash	Unit:	USD/tonne
	prices	Payment terms:	Letter of credit, telegraphic transfer
Timing:	Within 6 weeks	,	or documents against payment,
Unit:	USD/tonne		other payment terms normalized
Payment terms:	Letter of credit, telegraphic transfer	Publication:	Daily. 3-4pm London time
	or documents against payment,	Note:	Exchange deliverable units
	other payment terms normalized		
Publication:	Daily. 3-4pm London time		
Note:	Exchange deliverable units	MB-CU-0384	Copper grade A cathode SX-EW
		Quality:	<pre>premium, cif Shanghai, \$/tonne Solvent Extraction-Electro winning</pre>
		Quality.	Grade A cathode 9.9935% 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
		Note:	Exchange deliverable units



MB-CU-0412	Copper EQ cathode premium, cif Shanghai, \$/tonne	MB-CU-0513	Copper EQ cathode premium, cif Southeast Asia, \$/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, Te: 0.00020% max, Te: 0.00020% max	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	Quantity:	25 tonnes
Location:	cif Shanghai	Location:	cif ports of Vietnam (Ho Chi Minh/
Timing:	Within 6 weeks		Haiphong), Thailand (Bangkok,
Unit:	USD per tonne		Laem Chabang), Malaysia (Johor,
Payment terms:	LC, TT or DP other payments		Port Klang), Indonesia (Jakarta),
	normalized to cash		duty-unpaid premium on top of LME
Publication:	Weekly. Tuesday 4pm London time		cash prices
Note:	Non-exchange deliverable units	Timing:	Within 6 weeks
		Unit:	USD per tonne
		Payment terms:	LC, TT, DP or other payments
SOUTHEAST ASI	A & EAST ASIA	B 11.	normalized.
MD CH 0700	Common and A south old accombine	Publication:	Weekly, Tuesday 4pm London time
MB-CU-0399	Copper grade A cathode premium, cif Southeast Asia, \$/tonne	Note:	Non-exchange deliverable units
Quality:	Grade A 99.9935% min copper cathode	N/D CI   070/	
	conforming to LME specifications BS EN 1978:1998 – Cu-CATH-1	MB-CU-0386	Copper grade A cathode premium, cif Taiwan, \$/tonne
Quantity:	Min 25 tonnes	Quality:	Grade A 99.9935% min copper cathode
Location:	cif ports of Vietnam (Ho Chi Minh/		conforming to LME specifications
	Haiphong), Thailand (Bangkok,		BS EN 1978:1998 – Cu-CATH-1
	Laem Chabang), Malaysia (Johor,	Quantity:	Min 25 tonnes
	Port Klang), Indonesia (Jakarta),	Location:	cif delivery in Taiwanese ports, duty-
	duty-unpaid premium on top of LME cash prices		unpaid premium on top of LME cash prices
Timing:	Within 6 weeks	Timing:	Within 6 weeks
Unit:	USD/tonne	Unit:	USD/tonne
Payment terms:	Letter of credit, telegraphic transfer	Payment terms:	Letter of credit, telegraphic transfer
,	or documents against payment,	,	or documents against payment,
	other payment terms normalized		other payment terms normalized
Publication:	Weekly. Tuesday 3-4pm London time	Publication:	Once every two weeks. Tuesday
Note:	Exchange deliverable units		3-4pm London time
		Note:	Exchange deliverable units



MB-CU-0397	Copper grade A cathode warrant premium, in-whs Southeast Asia,	MB-CU-0404	Copper grade A cathode premium, cif South Korea, \$/tonne
Quality:	\$/tonne Grade A 99.9935% min copper cathode conforming to LME specifications BS EN 1978:1998 – Cu-CATH-1	Quality:	Grade A cathode 99.9935% min copper conforming to LME specifications BS EN 1978:1998 – Cu- CATH-1
Quantity:	Min 25 tonnes	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	Location:	Cif delivery in main South Korean ports (Busan, Incheon, Gwangyang, Onsan), duty-unpaid premium on top of LME cash prices
Timing:	Prompt release	Timing:	Within 6 weeks
Unit:	USD/tonne	Unit:	USD/tonne
Payment terms:	Cash, other payment terms normalized	Payment terms:	Letter of credit or telegraphic transfer, other payment terms normalized
Publication:	Fortnightly. Weds 3-4pm London time	Publication:	Weekly. Tuesday 3-4pm London time
		Notes:	Assessed range and single number. Exchange deliverable units
MB-CU-0398	Copper grade A cathode warrant		· ·
	premium, in-whs East Asia \$/tonne		
Quality:	Grade A cathode 99.9935%	EUROPE	
	min copper conforming to LME		
	specifications BS EN 1978:1998 - Cu- CATH-1	MB-CU-0369	Copper grade A cathode premium, cif Rotterdam, \$/tonne
Quantity:	Min 25 tonnes	Quality:	Grade A cathode 99.9935%
Location:	20 (000	ora an e).	
Location.	In any LME-approved warehouse in	addinty.	min copper conforming to LME
Location.	In any LME-approved warehouse in Taiwan (Kaohsiung) and South Korea	acamey.	min copper conforming to LME specifications BS EN 1978:1998 - Cu-
200dilo	In any LME-approved warehouse in Taiwan (Kaohsiung) and South Korea (Gwangyang, Busan or Incheon),	,	min copper conforming to LME specifications BS EN 1978:1998 – Cu- CATH-1
	In any LME-approved warehouse in Taiwan (Kaohsiung) and South Korea (Gwangyang, Busan or Incheon), premium on top of LME cash prices	Quantity:	min copper conforming to LME specifications BS EN 1978:1998 – Cu- CATH-1 Min 25 tonnes
Timing:	In any LME-approved warehouse in Taiwan (Kaohsiung) and South Korea (Gwangyang, Busan or Incheon), premium on top of LME cash prices Prompt release	,	min copper conforming to LME specifications BS EN 1978:1998 – Cu- CATH-1 Min 25 tonnes cif delivery in Rotterdam, duty unpaid
Timing: Unit:	In any LME-approved warehouse in Taiwan (Kaohsiung) and South Korea (Gwangyang, Busan or Incheon), premium on top of LME cash prices Prompt release USD/tonne	Quantity: Location:	min copper conforming to LME specifications BS EN 1978:1998 – Cu- CATH-1 Min 25 tonnes cif delivery in Rotterdam, duty unpaid premium on top of LME cash prices
Timing: Unit: Payment terms:	In any LME-approved warehouse in Taiwan (Kaohsiung) and South Korea (Gwangyang, Busan or Incheon), premium on top of LME cash prices Prompt release USD/tonne Cash, other payment terms normalized	Quantity: Location: Timing:	min copper conforming to LME specifications BS EN 1978:1998 – Cu- CATH-1 Min 25 tonnes cif delivery in Rotterdam, duty unpaid premium on top of LME cash prices Within 4 weeks
Timing: Unit:	In any LME-approved warehouse in Taiwan (Kaohsiung) and South Korea (Gwangyang, Busan or Incheon), premium on top of LME cash prices Prompt release USD/tonne	Quantity: Location: Timing: Unit:	min copper conforming to LME specifications BS EN 1978:1998 – Cu- CATH-1 Min 25 tonnes cif delivery in Rotterdam, duty unpaid premium on top of LME cash prices Within 4 weeks USD/tonne
Timing: Unit: Payment terms:	In any LME-approved warehouse in Taiwan (Kaohsiung) and South Korea (Gwangyang, Busan or Incheon), premium on top of LME cash prices Prompt release USD/tonne Cash, other payment terms normalized	Quantity: Location: Timing:	min copper conforming to LME specifications BS EN 1978:1998 – Cu- CATH-1 Min 25 tonnes cif delivery in Rotterdam, duty unpaid premium on top of LME cash prices Within 4 weeks
Timing: Unit: Payment terms:	In any LME-approved warehouse in Taiwan (Kaohsiung) and South Korea (Gwangyang, Busan or Incheon), premium on top of LME cash prices Prompt release USD/tonne Cash, other payment terms normalized	Quantity: Location: Timing: Unit:	min copper conforming to LME specifications BS EN 1978:1998 – Cu-CATH-1 Min 25 tonnes cif delivery in Rotterdam, duty unpaid premium on top of LME cash prices Within 4 weeks USD/tonne Cash, other payment terms normalized Once every two weeks. Tuesday
Timing: Unit: Payment terms:	In any LME-approved warehouse in Taiwan (Kaohsiung) and South Korea (Gwangyang, Busan or Incheon), premium on top of LME cash prices Prompt release USD/tonne Cash, other payment terms normalized	Quantity: Location: Timing: Unit: Payment terms:	min copper conforming to LME specifications BS EN 1978:1998 – Cu-CATH-1 Min 25 tonnes cif delivery in Rotterdam, duty unpaid premium on top of LME cash prices Within 4 weeks USD/tonne Cash, other payment terms normalized



MB-CU-0406	Copper grade A cathode premium, cif Leghorn, \$/tonne	MB-CU-0400	Copper grade A cathode warrant premium, in-whs North Europe, \$/
Quality:	Grade A cathode 99.9935% min copper conforming to LME specifications BS EN 1978:1998 – Cu- CATH-1	Quality:	tonne Grade A cathode 99.9935% min copper conforming to LME specifications BS EN 1978:1998 – Cu-
Quantity:	25 tonnes		CATH-1
Location:	cif delivery in Leghorn (Italy), duty unpaid	Quantity:	Min 25 tonnes
	premium on top of LME cash prices	Location:	In any LME-approved warehouse in
Timing: Unit:	Within 4 weeks USD/tonne		North Europe (Belgium, Germany, the Netherlands, Sweden and the UK),
Payment terms:	Cash, other payment terms normalized	Timing:	premium on top of LME cash prices Prompt release
Publication:	Once every two weeks. Tuesday	Unit:	USD/tonne
	3-4pm London time	Payment terms:	Cash, other payment terms
Notes:	Assessed range and single number	•	normalized
	Exchange deliverable units	Publication:	Fortnightly. Weds 3-4pm London time
MB-CU-0372  Quality:	Copper grade A cathode premium, delivered Germany, \$/tonne Grade A cathode 99.9935%	MB-CU-0401	Copper grade A cathode warrant premium, in-whs South Europe, \$/tonne
addirey.	min copper conforming to LME	Quality:	Grade A cathode 99.9935% min copper
	specifications BS EN 1978:1998 – Cu- CATH-1	,	conforming to LME specifications BS EN 1978:1998 – Cu-CATH-1
Quantity:	Min 25 tonnes	Quantity:	Min 25 tonnes
Location:	Delivered consumer works in	Location:	In any LME-approved warehouse in
	Germany, duty unpaid premium on		South Europe (Spain, Italy), premium
Timing:	top of LME cash prices Within 4 weeks	Timing:	on top of LME cash prices Prompt release
Unit:	USD/tonne	Unit:	USD/tonne
Payment terms:	Cash, other payment terms	Payment terms:	Cash, other payment terms normalized
,	normalized	Publication:	Fortnightly. Weds 3-4pm London time
Publication:	Once every two weeks. Tuesday 3-4pm London time		
Note:	Exchange deliverable units	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
		Note:	Non-exchange deliverable units



#### **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 1978:2022 -Cu-CATH-1 or Grade 1 Electrolytic Copper Cathode ATSM B1115-10

Quantity: Min 25 tonnes Location: ddp US Midwest Within 4 weeks Timing: Unit: US cents per pound

30 days, other payment terms Payment:

normalized

Publication: Weekly. Tuesday 3-4pm London time

## Lead concentrate

Copper rod

UNITED STATES

MB-CU-0410

Quality:

Quantity:

Location:

Publication:

Unit

MB-CU-0309 Copper grade 1 cathode all-in price, ddp Midwest US, US cents/lb

Grade A 99.9935% min copper Quality:

> cathode conforming to LME specifications BS EN 1978:2022 -Cu-CATH-1 or Grade 1 Electrolytic Copper Cathode ATSM B1115-10

Location: ddp US Midwest Unit: US cents per pound

Publication: Daily

Notes: Comex spot close price plus

Fastmarkets copper premium

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

Any LME-approved warehouse in the Location:

US, premium on top of LME cash prices

Grade A 99.9935% min copper cathode Quality:

> 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: Fortnightly. Weds 3-4pm London time **CHINA** 

MB-PB-0104 Lead spot concentrate TC, high

silver, cif China, \$/tonne

Copper rod premium, ddp

Purity of 99.95-99.99%. Thicknesses

of 8 millimeters or 0.3125 inches

MidwestUS, US cents/lb

Min 25,000 pounds

US cents per pound

Delivered US Midwest

Monthly. First Thursday

Quality: 55-65% lead content concentrate,

high silver 2-4kg, arsenic below 0.7%,

mercury below 0.05%

Min 2,000 tonnes Quantity:

Treatment Charge on cif basis Location:

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

MB-PB-0103 Lead spot concentrate TC, low

silver, cif China, \$/tonne

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

Within 13 weeks Timing: USD/tonne Unit:

Payment terms: Letter of Credit, quotation period M+3 Publication: Monthly. Last Friday of the month,

3-4pm London time



SOUTHEAST ASIA & EAST ASIA

# Refined lead

INDIA		MB-PB-0107	Lead 99.97% ingot premium, cif Southeast Asia, \$/tonne
MB-PB-0087	Lead 99.97% ingot premium, cif India, \$/tonne	Quality:	Lead ingot of 99.97-99.99% purity conforming to LME specification BS
Quality:	Lead ingot 99.97% to 99.99% purity to LME specification BS EN 12659:1999,	O viti	EN 12659:1999, GB/T 469/2005 or ASTM B29-03 (2009)
Quantity:	GB/T 469/2005 or ASTM B29-03 (2009) Min 25 tonnes	Quantity: Location:	25 tonnes cif to ports of Vietnam (Ho Chi
Location:	cif delivery in Nhava Sheva (India), premium on top of LME cash prices	Eddation.	Minh/Haiphong), Thailand (Bangkok, Laem Chabang), Malaysia (Johor,
Timing:	Within 5 weeks		Port Klang), Indonesia (Jakarta),
Unit:	USD/tonne		duty-unpaid premium on top of LME
Payment terms:	Letter of credit, telegraphic transfer		cash prices
	or cash against documents, other	Timing:	Within 5 weeks
D 11:	terms normalized	Unit:	USD/tonne
Publication:	Once every two weeks. Tuesday 3-4pm London time	Payment terms:	Letter of credit, telegraphic transfer or cash against documents, other terms normalized
		Publication:	The first Tuesday of every month,
MB-PB-0086	Lead 99.99% ingot premium, cif	r ablication.	3-4pm London time
115 15 0000	India, \$/tonne		5 Ipili London time
Quality:	Lead ingot of 99.99% minimum		
,	purity conforming to LME specification BS EN 12659:1999, GB/T	MB-PB-0108	Lead 99.99% ingot premium, cif Southeast Asia, \$/tonne
	469/2005 or ASTM B29-03 (2009)	Quality:	Lead ingot of 99.99% min purity to
Quantity:	Min 25 tonnes		LME specification BS EN 12659:1999,
Location:	cif Nhava Sheva (India), duty-unpaid		GB/T 469/2005 or ASTM B29-03 (2009)
	premium on top of LME cash prices	Quantity:	25 tonnes
Timing:	Within 5 weeks	Location:	cif ports of Vietnam (Ho Chi Minh/
Unit:	USD/tonne		Haiphong), Thailand (Bangkok, Laem
Payment terms:	Letter of credit, telegraphic transfer or cash against documents, other terms normalized		Chabang), Malaysia (Johor, Port Klang), Indonesia (Jakarta), duty-unpaid premium on top of LME cash prices
Publication:	Once every two weeks. Tuesday	Timing:	Within 5 weeks
r ablication.	3-4pm London time	Unit:	USD/tonne
	5 .p 255	Payment terms:	Letter of credit, telegraphic transfer
		.,	or cash against documents, other terms normalized
		Publication:	The first Tuesday of every month, 3-4pm London time



MB-PB-0084	Lead 99.97% ingot premium, cif Taiwan, \$/tonne	MB-PB-0106	Lead min 99.97% ingot warrant premium, in-whs East Asia
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)	Quality:	\$/tonne Lead ingot of 99.97% to 99.99% purity conforming to LME specification BS EN 12659:1999, GB/T
Quantity:	25 tonnes		469/2005 or ASTM B29-03 (2009)
Location:	cif delivery main Taiwan ports (Taipei,	Quantity:	25 tonnes
	Kaohsiung or Keelung), duty-unpaid premium on top of LME cash prices	Location:	In any LME-approved warehouse in Taiwan (Kaohsiung) and South Korea
Timing: Unit:	Within 5 weeks USD/tonne		(Gwangyang, Busan or Incheon), premium on top of LME cash prices
Payment terms:	Letter of credit, telegraphic transfer or cash against documents, other	Timing: Unit:	Prompt release USD/tonne
Publication:	terms normalized Once every two weeks. Tuesday 3-4pm London time	Payment terms: Publication:	Cash, other terms normalized Fortnightly. Weds 3-4pm London time
		EUROPE	
MB-PB-0083	Lead 99.99% ingot premium, cif		
	Taiwan, \$/tonne	MB-PB-0109	Lead 99.97% ingot warrant
Quality:	Lead ingot 99.99% min purity to LME specification BS EN 12659:1999, GB/T		premium, in-whs North Europe, \$/ tonne

/	5 ,
	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: Fortnightly. Weds 3-4pm London time

Location: In any LME-approved warehouse in

North Europe (Belgium, Germany, the Netherlands, Sweden and the UK), premium on top of LME cash prices Lead of 99.97% to 99.99% purity

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)

ASTM DZ9-U3 (2009)

Unit: USD/tonne Quantity: Min 25 tonnes

Payment terms: Cash, other payment terms

normalized

Timing: Prompt release Form: Cathode

Publication: Fortnightly. Weds 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: Fortnightly. Weds 3-4pm London time

MB-PB-0097 Lead 99.97% ingot warrant

premium, in-whs US, \$/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

the USA, premium on top of LME

cash prices

Timing: Prompt release
Unit: USD/tonne

Payment terms: Cash, other payment terms

normalized

Publication: Fortnightly. Weds 3-4pm London time

#### **UNITED STATES**

MB-PB-0006 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: Monthly. First Tuesday 3-4pm

London time

MB-PB-0056 Lead 99.97% ingot all-in price,

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 20 tonnes

Location: Delivered consumer works, Midwest

Delivery: Within 5 weeks
Unit: US cents per pound

Payment terms: 30 days, other payment terms

normalized

Publication: Daily

Notes: London Metal Exchange cash lead

AM bid price plus Fastmarkets lead

premium



## Nickel ore

Please see **Ores** section.

## Nickel

**CHINA** 

MB-NI-0143 Nickel min 99.8% full plate

premium, in-whs Shanghai,

\$/tonne

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 60 tonnes

Location: In-warehouse Shanghai bonded zone,

premium on top of LME cash prices

Timing: Within 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

MB-NI-0142 Nickel min 99.8% full plate premium, cif Shanghai, \$/tonne

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 60 tonnes

Location: cif delivery basis Shanghai port,

premium on top of LME cash prices

Timing: Within 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 Madagasgar

**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: Fortnightly. Weds 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: Fortnightly. Weds 3-4pm London time



MB-NI-0139	Nickel min 99.8% full plate warrant premium, in-whs East	EUROPE	
Quality:	Asia, \$/tonne Full-plate cathode. 99.80% min	MB-NI-0003	Nickel uncut cathode premium, in-whs Rotterdam, \$/tonne
,	primary nickel conforming to LME specification: ASTM B39-79 (2013) or GB/T 6516-2010 - Ni9990 grade	Quality:	Full-plate cathode. 99.80% min primary nickel conforming to LME specification: ASTM B39-79 (2013) or
Quantity: Location:	6 tonnes	Ougntity	GB/T 6516-2010 - Ni9990 grade 20 tonnes
Location.	In any LME-approved warehouse in Taiwan (Kaohsiung) and South Korea (Gwangyang, Busan or Incheon),	Quantity: Location:	In-warehouse Rotterdam, premium on top of LME cash prices
	premium on top of LME cash prices	Timing:	Within one week
Timing:	Prompt release	Unit:	USD/tonne
Unit:	USD/tonne	Payment terms:	Cash, other payment terms normalized
Payment terms: Publication:	Cash, other terms normalized Fortnightly. Weds 3-4pm London time	Publication:	Weekly. Tuesday 3-4pm London time
MB-NI-0140	Nickel min 99.8% briquette	MB-NI-0001	Nickel 4x4 cathode premium, in-whs Rotterdam, \$/tonne
MB-141-0140	warrant premium, in-whs East	Quality:	4x4 cut cathode. 99.80% min
	Asia, \$/tonne	,	primary nickel conforming to LME
Quality:	Briquette. 99.80% min primary nickel		specification: ASTM B39-79 (2013) or
	conforming to LME specification:		GB/T 6516-2010 - Ni9990 grade
	ASTM B39-79 (2013) or GB/T 6516-	Quantity:	Min 20 tonnes
Quantity:	2010 - Ni9990 grade 6 tonnes	Location:	In-warehouse Rotterdam, premium on top of LME cash prices
Location:	In any LME-approved warehouse in	Timing:	Within one week
Location.	Taiwan (Kaohsiung) and South Korea	Unit:	USD/tonne
	(Gwangyang, Busan or Incheon), premium on top of LME cash prices	Payment terms:	Cash, other payment terms normalized
Timing:	Prompt release	Publication:	Weekly. Tuesday 3-4pm London time
Unit:	USD/tonne		
Payment terms:	Cash, other payment terms		
Publication:	normalized Fortnightly. Weds 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	MB-NI-0242  Quality:	Nickel 4x4 cathode all-in price, delivered Midwest US, US cents/lb 99.8% minimum primary 4x4
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		cut cathodes conforming to LME specification: ASTM B39-79 (2013) or GB/T 6516-2010 - Ni9990 grade specification: ASTM B39-79 (2013) or GB/T 6516-2010 - Ni9990 grade.
Quantity:	Min 6 tonnes		Smaller cut cathode dimensions may
Location:	Any LME-approved warehouse in		be normalized.
	North Europe (Belgium, Germany, the	Quantity:	Min 20 tonnes
	Netherlands, Sweden and the UK),	Location:	Delivered consumer works US
	premium on top of LME cash prices	Delivery:	Within four weeks
Timing:	Prompt release	Unit:	US cents per lb
Unit:	USD/tonne	Payment terms:	30 days, other terms normalized
Payment terms:	Cash, other terms normalized	Publication:	Daily
Publication:	Fortnightly. Weds 3-4pm London time	Notes:	London Metal Exchange cash nickel AM bid price plus Fastmarkets nickel 4x4 cathode premium
UNITED STATES			·

MB-NI-0240	Nickel 4x4 cathode premium, delivered Midwest US, US cents/lb	MB-NI-0241	Nickel briquette 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 specification: ASTM B39-79 (2013) or GB/T 6516-2010 - Ni9990 grade	Quality:	Briquette. 99.8% minimum primary nickel conforming to LME specification: ASTM B39-79 (2013) or GB/T 6516-2010 - Ni9990 grade specification: ASTM B39-79 (2013) or GB/T 6516-2010 - Ni9990 grade
Quantity:	Min 20 tonnes	Quantity:	Min 20 tonnes
Location:	Delivered consumer works US	Location:	Delivered consumer works US
Timing:	Within four weeks	Timing:	Within four weeks
Unit:	US cents per lb	Unit:	US cents per lb
Payment terms:	30 days, other payment terms normalized	Payment terms:	30 days, other payment terms normalized
Publication:	Monthly. First Tuesday 3-4pm London time	Publication:	Monthly. First Tuesday 3-4pm London time



MB-NI-0243 Nickel briquette all-in price, delivered Midwest US, US cents/lb

Quality: 99.8% minimum primary nickel

briquettes conforming to LME specification: ASTM B39-79 (2013) or GB/T 6516-2010 - Ni9990 grade specification: ASTM B39-79 (2013) or

GB/T 6516-2010 - Ni9990 grade

Quantity: Min 20 tonnes

Location: Delivered consumer works US

Delivery: Within four weeks Unit: US cents per lb.

Payment terms: 30 days, other terms normalized

Publication: Dail

Notes: London Metal Exchange cash nickel

AM bid price plus Fastmarkets nickel

briquette premium

Tin

**SOUTHEAST ASIA & EAST ASIA** 

MB-SN-0038 Tin 99.9% ingot premium, cif

Taiwan, \$/tonne

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

**GLOBAL** 

MB-NI-0256 Nickel low-carbon metal premium, cif global, \$/tonne

Quality: Briquette, 99.80% min primary nickel:

ASTM B39-79 (2013) or GB/T 6516-2010 – Ni9990 grade Carbon Limit: 18tCO2e per tonne of nickel briquette produced, Scope 1 and 2 emissions, measured following ISO14040 standards or via an independent third party lifecycle assessment (LCA). Additional ESG factors: All assets and third-party feeds should be in compliance to ICMM's Mining Principles and Towards Sustainable Mining, as well as the Initiative for

Responsible Mining (IRMA).

Quantity: Min 20 tonnes

Location: cif global premium, premium on top

of exchange or trade platform listed

nickel price

Timing: Up to 12 months Unit: USD/tonne

Publication: Monthly, first working day of the

month, 4pm London time

Notes: Price will follow the UK pricing

calendar and will be assessed from London. Sanctioned material will not be considered for the price

assessment.

MB-SN-0045 Tin 99.9% ingot premium, fob Singapore, \$/tonne

Quality: Ingot. 99.9% tin purity conforming

to LME specification: BS EN 610:1996 with 200-300 ppm lead content

Quantity: Min 5 tonnes

Location: fob Singapore, premium on top of

LME cash prices

Timing: Within 2 weeks
Unit: USD/tonne

Publication:

Payment terms: Cash against document, telegraphic

transfer, other terms normalized Once every two weeks. Tuesday,

3-4pm London time

MB-SN-0042 Tin min 99.85% ingot warrant

premium, in-whs Southeast Asia,

\$/tonne

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: Fortnightly. Weds 3-4pm London time



MB-SN-0011 **EUROPE** Tin grade A min 99.85% ingot

premium, ddp Midwest US, MB-SN-0002 Tin 99.9% ingot premium, \$/tonne

in-whs Rotterdam, \$ per tonne Quality:

Delivered premium over cost of tin of Quality: Ingot. 99.9% tin purity conforming 99.85% purity (min) conforming to

BS EN 610:1996 to LME specification: BS EN 610:1996

with 100-300 ppm lead content Quantity: Min 20 tonnes

Min 20 tonnes ddp US Midwest Quantity: Location:

In-warehouse Rotterdam, premium Location: Timing: Within 2 weeks

on top of LME cash prices US dollars per tonne Unit: Within 2 weeks 30-days, other terms normalized Timing: Payment terms:

Unit: USD/tonne Publication: Monthly. First Tuesday 3-4pm

Cash against conditional release, Payment terms: London time

other payment terms normalized

Publication: Once every two weeks. Tuesday 3-4pm London time MB-SN-0012 Tin grade A min 99.85% ingot

all-in price, ddp Midwest US, \$/tonne

MB-SN-0029 Tin 99.9% low lead ingot premium, Quality: Ingot. Min 99.85% tin purity

in-whs Rotterdam, \$/tonne conforming to LME specification BS Ingot. 99.9% tin purity conforming EN 610:1996 and ASTM grade A, max Quality:

to LME specification: BS EN 610:1996 500ppm lead

Min 20 tonnes with less than 100 ppm lead content Quantity:

Quantity: Min 20 tonnes Location: Delivered consumer works US

Within 2 weeks Location: In-warehouse Rotterdam, premium Timing: on top of LME cash prices USD/tonne Unit:

Within 2 weeks Timing: Payment terms: 30 days, other payment terms

USD/tonne normalized Unit:

Cash against conditional release, Publication: Payment terms: Daily

other payment terms normalized Notes: London Metal Exchange cash tin AM

Publication: Once every two weeks. Tuesday bid price plus Fastmarkets tin grade

> 3-4pm London time A premium

**UNITED STATES** 

in-whs Baltimore, \$/tonne Ingot. Min 99.85% tin purity Quality:

conforming to LME specification: BS EN 610:1996, max 500ppm lead, total

impurities must not exceed 0.15%

Tin 99.85% ingot premium,

Quantity: Min 20 tonnes

MB-SN-0036

In-warehouse Baltimore, premium on Location:

top of LME cash prices

Unit: USD/tonne

Payment terms: Cash against documents, other

payment terms normalized

Publication: Monthly. First Tuesday 3-4pm

London time



## Zinc concentrate

## Refined zinc

ш	I I	I A

MB-ZN-0110	Zinc spot concentrate TC, cif
MD-ZIN-UTIU	Zinc spot concentrate 1C, cir

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

Publication: Second and last Friday of each

month

MB-ZN-0120 Zinc concentrate TC spot,

delivered North China, yuan/

tonne

Concentrate. Zn 50%, As <0.4%, Hg Quality:

<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

Cash against document or Payment terms:

prepayments

Publication: Monthly. Last Friday of every month.

**CHINA** 

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

Within 4 weeks Timing: 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

Publication:

Payment terms: Letter of credit, telegraphic transfer

> or documents against payment, other payment terms normalized 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

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

#### **SOUTHEAST ASIA & EAST ASIA**

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-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,	MB-ZN-0099	Zinc SHG min 99.995% ingot premium, dp fca Antwerp, \$/tonne
Quality:	\$/tonne 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,	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
	ASTM B6-12 - LME grade or GB/T	Quantity:	Min 100 tonnes
_	470- 2008	Location:	Free-carrier basis delivery in Antwerp,
Quantity: Location:	Min 100 tonnes		duty-unpaid premium on LME cash
Location:	Any LME-approved warehouse in Singapore/Malaysia (Johor, Port	Timing:	prices Within 4 weeks
	Klang), premium on top of LME cash	Unit:	USD/tonne
	prices	Payment terms:	Cash, other terms normalized
Timing: Unit:	Prompt release USD/tonne	Publication:	Weekly. Tuesday 3-4pm London time
Payment terms:	Cash, other payment terms	NAD 7NI 0407	7' (110 ' 00 00 00 00 ' '
Publication:	normalized Fortnightly. Weds 3-4pm London time	MB-ZN-0103	Zinc SHG min 99.995% ingot premium, fca dp Italy, \$/tonne
r ablication.	Tortinghtly. Weds 5 4pm London time	Quality:	Special High Grade zinc ingot of minimum 99.995% purity,
EUROPE			conforming to LME specifications
			and relevant standards: BS EN
MB-ZN-0001	Zinc SHG min 99.995% ingot premium, dp fca Rotterdam, \$/ tonne		1179:2003, ISO 752:2004 - ZN-1 grade, ASTM B6-12 - LME grade or GB/T 470- 2008
Quality:	Special High Grade zinc ingot	Quantity:	Min 100 tonnes
	of minimum 99.995% purity,	Location:	Free-carrier basis delivery in Italy,
	conforming to LME specifications and relevant standards: BS EN		duty-paid premium on top of LME
	and relevant standards: BS EIN 1179:2003, ISO 752:2004 - ZN-1 grade,	Timing:	cash prices Within 4 weeks
	ASTM B6-12 - LME grade or GB/T 470-	Unit:	USD/tonne
	2008	Payment terms:	Cash, other terms normalized
Quantity:	Min 100 tonnes	Publication:	Fortnightly. Tuesday 3-4pm
Location:	Free-carrier basis delivery in		London time
	Rotterdam, duty-paid premium on top of LME cash prices		
Timing:	Within 4 weeks	MB-ZN-0102	Zinc SHG min 99.995% ingot
Unit:	USD/tonne		premium, ddp Italy, \$/per tonne
Payment terms:	Cash, other payment terms normalized	Quality:	Special High Grade zinc ingot of minimum 99.995% purity, conforming
Publication:	Weekly. Tuesday 3-4pm London time		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:	Fortnightly. Tuesday 3-4pm London time



MB-ZN-0117	Zinc SHG min 99.995% warrant	UNITED STATES	
Quality:	premium, in-whs North Europe, \$/ tonne  Special High Grade zinc ingot	MB-ZN-0005	Zinc SHG min 99.995% ingot premium, ddp Midwest US,
Quality.	of minimum 99.995% purity, conforming to LME specifications and relevant standards: BS EN 1179:2003, ISO 752:2004 - ZN-1 grade,	Quality:	US cents/lb Min 99.995% special high grade zinc ingot, conforming to LME specifications and relevant BS EN
	ASTM B6-12 - LME grade or GB/T 470- 2008	Ougntity	standards Min 25 tonnes
Quantity:	Min 100 tonnes	Quantity: Location:	Delivered consumer works Midwest
Location:	In any LME-approved warehouse in		US
	North European locations (Belgium,	Timing:	Within 4 weeks
	Germany, the Netherlands, Sweden	Unit:	US cents per pound
	and the UK), premium on top of LME	Payment terms:	30 days, other payment terms
Timing:	cash prices Prompt release	Publication:	normalized Weekly. Tuesday 3-4pm London time
Unit:	USD/tonne	rabileation.	Weekly. Idesday 5-4pm London time
Payment terms:	Cash, other payment terms		
	normalized	MB-ZN-0061	Zinc SHG min 99.995% ingot all-in
Publication:	Fortnightly. Weds 3-4pm London time	Quality:	price, ddp Midwest US, US cents/lb Zinc of 99.995% purity (min.) conforming to BS EN 1179: 2003
MB-ZN-0082	Zinc SHG min 99.995% ingot	Location:	Delivered consumer works, Midwest
	premium monthly average,	Unit:	US cents per pound
	delivered UK, £/tonne	Publication:	Daily
Quality:	Special High Grade zinc ingot of minimum 99.995% purity, conforming to LME specifications and relevant standards: BS EN	Notes:	London Metal Exchange cash zinc AM bid price plus Fastmarkets zinc premium
	1179:2003, ISO 752:2004 - ZN-1 grade, ASTM B6-12 - LME grade or GB/T 470-	MB-ZN-0104	Zinc SHG min 99.995% warrant
Quantity: Location:	2008 Min 25 tonnes 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	Quality:	premium, in-whs US, \$/per tonne 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-
	delivery (either delivered customer	O + : +	2008
	works or FCA Rotterdam plus transport, warehousing, delivery and financing costs)	Quantity: Location:	25 tonnes In any LME-approved warehouse in the US, premium on top of LME cash
Unit:	GBP/tonne		prices
Payment terms:	Cash, other payment terms	Timing:	Prompt release
Publication:	normalized  Monthly. 1st working day of the  month between 1pm and 2pm	Unit: Payment terms:	USD/tonne Cash, other payment terms normalized
	London time	Publication:	Fortnightly. Weds 3-4pm 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.		



# Bulk alloys

# Ferro-chrome

#### 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 2-3pm 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 5-6pm Shanghai

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

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Publication: Weekly. Tuesday 5-6pm Shanghai

time

#### **SOUTHEAST ASIA & EAST ASIA**

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 5-6pm

Shanghai time

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 5-6pm

Shanghai time

MB-FEC-0023 Ferro-chrome 50% Cr import, cif

Indonesia, \$/Ib

Quality: 10-100mm lump. Chrome base 50%,

range 48-52%; carbon case 7%, max 9%; silicon base 3%, max 6%; phosphorous max 0.03%; sulphur

max 0.06%

Quantity: Min 100 tonnes

Location: cif Indonesian main ports

Timing: Within 6 weeks
Unit: USD per lb
Payment terms: LC/DP

iyinent tenns. LC/Di

Publication: Fortnightly. Thursday 5-6pm

Shanghai time



MB-FEC-0025 Green ferroalloy domestic, **EUROPE** ferro-chrome 6-8% C, 50% Cr. differential to FeCr assessment, MB-FEC-0021 Ferro-chrome, high carbon, ddp China, yuan/tonne 6-8.5% C, basis 65-70% Cr, max Quality: Scope 1-3 emissions of 0-3 tonnes 1.5% Si, delivered Europe, \$ per lb of CO2, composite energy intensity: Lump, Cr 65-70%, C 6-8.5%, Si 1.5%. ≤850 kilogram coal equivalent per Quality: Min 24 tonnes tonne, electricity consumption: Quantity: ≤3300 kWh per tonne, chrome Location: Delivered consumer works Europe element usage rate: ≥90%, water (other incoterms will be normalized) recycling rate: ≥95%, allowable Unit: USD per lb of chrome contained emission concentration: ≤30 Payment terms: 30 days, other payment terms milligram per cubic meter, slag normalized treatment: 100%, 0 wastewater Publication: Weekly, Tuesday at 2-3pm London discharge time Quantity: Min 3 tonnes Location: ddp China Timing: Open MB-FEC-0020 Ferro-chrome, high carbon, Unit: CNY/tonne, normalized to Cr 50% 6-8.5% C, basis 60-64.9% Cr, Publication: Weekly. Tuesday 5-6pm Shanghai max 3% Si, cif Europe, \$ per lb Cr Lump, Cr 60-64.9%, C 6-8.5%, Si 3% time Quality: max Quantity: Min 24 tonnes MB-FEC-0026 Green ferroalloy domestic, Location: cif major European ports (other ferro-chrome 6-8% C, 50% Cr, incoterms will be normalized) USD per lb of chrome contained weekly inferred price, ddp China, Unit: yuan/tonne Payment terms: 30 days, other payment terms Quality: Scope 1-3 emissions of 0-3 tonnes normalized of CO2, composite energy intensity: Publication: Weekly, Tuesday at 2-3pm London ≤850 kilogram coal equivalent per tonne, electricity consumption: ≤3300 kWh per tonne, chrome element usage rate: ≥90%, water MB-FEC-0024 Ferro-chrome 50% Cr, delivered recycling rate: ≥95%, allowable Europe, \$/lb Cr Lump. Chrome base 50%, range emission concentration: ≤30 Quality: milligram per cubic meter, slag 47-56%; carbon base 6.5%, max treatment: 100%, 0 wastewater 9%; silicon base 3%, max 6%; discharge phosphorous max 0.03%; sulphur Quantity: Min 3 tonnes max 0.06%. ddp China Min 100 tonnes Location: Quantity: Location: Delivered consumer works Europe Timing: Open Unit: CNY/tonne, normalized to Cr 50% (other incoterms will be normalized) Publication: Weekly. Tuesday 5-6pm Shanghai Unit: USD per lb contained Cr time Payment terms: 30 days, other payment terms

www.fastmarkets.com 41

Publication:

normalized

Weekly, Tuesday 2-3pm London time



MB-FEC-0002	Ferro-chrome low carbon, 65% Cr,	MB-FEC-0001	Ferro-chrome low phosphorous,
	max 0.06% C, delivered Europe, \$/lb Cr		min 65% Cr, max 0.015% P, delivered Europe, \$/lb
Quality:	Lump. Cr 65% basis (range 60-70% Cr), C 0.06% max, Si 1.5% max, P	Quality:	Lump. Cr 65% min, Si 1% max, C 6-8%, P 0.015% max, Ti 0.05%
	0.05% max, S 0.05% max	Quantity:	Min 25 tonnes
Quantity:	Min 25 tonnes	Location:	Delivered consumer works Europe
Location: Unit:	Delivered consumer works Europe USD per lb of chrome contained	Unit: Payment terms:	USD per lb of chrome contained 30 days, other payment terms
Payment terms:	30 days, other payment terms	,	normalized
Publication:	normalized Fortnightly. Tuesday between 2pm	Publication:	Fortnightly. Tuesday 2-3pm London time
	and 3pm London time		
		MB-FEC-0016	Ferro-chrome lumpy Cr charge
MB-FEC-0003	Ferro-chrome 0.10% C, average 65-70% Cr, delivered Europe,		quarterly, basis 52% Cr (and high carbon), delivered Europe, \$/lb Cr
	\$/Ib Cr	Quality:	Lump. Basis 52% Cr, high carbon
Quality:	Lump. Cr 65% basis (range 65-70%	Quantity:	Min not specified
	Cr), C 0.10% excluding material up to	Location:	Delivered consumer works Europe
	0.06% C, Si 1.5% max, P 0.03% max,	Unit:	US cents per lb of chrome contained
Quantity	S 0.03% max Min 25 tonnes	Payment terms: Publication:	Not specified
Quantity: Location:	Delivered consumer works Europe	r ublication.	Quarterly as per industry announcement to Johannesburg
Unit:	USD per lb of chrome contained		Stock Exchange
Payment terms:	30 days, other payment terms	Notes:	Fastmarkets does not independently
,	normalized		assess this price, but publishes it as
Publication:	Fortnightly. Tuesday 2-3pm London		a reference. The price is settled every
	time		quarter by leading ferro-chrome
			producers and consumers and is then
MB-FEC-0022	Forms abroma law agriban 0.109/		announced by a leading producer to
MB-FEC-UUZZ	Ferro-chrome low carbon, 0.10% C, basis 60-64.9% Cr, CIF Europe,		the Johannesburg Stock Exchange. Fastmarkets obtains the benchmark
	\$ per lb Cr		number from market participants and/
Quality:	Lump, Cr 60-64.9%, C 0.10%, Si 1.5%		or from the official announcement.
,	max, P 0.03% max, S 0.03% max		
Quantity:	Min 25 tonnes		
Location:	CIF Europe	MB-FEC-0019	Ferro-chrome lumpy Cr benchmark
Unit:	USD per Ib of chrome contained		indicator, charge basis 52% (and
Payment terms:	30 days, other payment terms normalized	Quality:	high carbon), Europe, \$/lb Ferro-chrome lumpy, basis 52%
Publication:	Fortnightly. Tuesday 2-3pm London	•	chrome content
	time	Unit:	US cents per lb of chrome content to major European destinations
		Publication:	Weekly. Tuesday 2-3pm London time
		Notes:	The price indicates a representative
			level for the European ferro-chrome
			benchmark if it were to be settled on
			that Tuesday. 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-0008 Ferro-chrome low carbon 0.05%C,

65% Cr min, in-whs Pittsburgh,

US cents/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-0009 Ferro-chrome low carbon 0.10%C,

62% Cr min, in-whs Pittsburgh,

US cents/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

Ferro-manganese

**EUROPE** 

MB-FEM-0006 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-FEM-0007 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 5-6pm Shanghai time

MB-FEC-0010 Ferro-chrome low carbon 0.15%C,

60% Cr min, in-whs Pittsburgh,

US cents/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



MB-FEM-0008 Green ferroalloy domestic,

ferro-manganese max 7% C, 65% Mn min, differential to FeMn assessment, in-whs China,

yuan/tonne

Quality: Scope 1-3 emissions of 0-3 tonnes

of CO2, composite energy intensity: ≤660 kilogram coal equivalent per tonne, electricity consumption: ≤2400 kWh per tonne, manganese element usage rate: ≥95%, water recycling rate: ≥95%, allowable emission concentration: ≤30 milligram per cubic meter, slag treatment: 100%, 0 wastewater

discharge

Quantity: Min 3 tonnes Location: In-whs China

Timing: Open

MB-FEM-0009

Unit: CNY/tonne, normalized to Mn 65%

Publication: Weekly. Friday 5-6pm Shanghai time

Green ferroalloy domestic, MB-FEM-0003

ferro-manganese max 7% C, 65% Mn min, weekly inferred price, in-whs China, yuan/tonne

Quality: Scope 1-3 emissions of 0-3 tonnes

of CO2, composite energy intensity: ≤660 kilogram coal equivalent per tonne, electricity consumption: ≤2400 kWh per tonne, manganese element usage rate: ≥95%, water recycling rate: ≥95%, allowable emission concentration: ≤30 milligram per cubic meter, slag

treatment: 100%, 0 wastewater

discharge

Quantity: Min 3 tonnes Location: In-whs China

Timing: Open

Unit: CNY/tonne, normalized to Mn 65%
Publication: Weekly. Friday 5-6pm Shanghai 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-0002 Ferro-manganese low carbon

80% Mn, max 0.80% C, in-whs Pittsburgh, US cents/lb

Quality: Manganese min. 80.00%, carbon

max. 0.80%

Quantity: Min 20 tons

Location: In-warehouse Pittsburgh
Unit: US cents per pound

Publication: Once a week, every Thursday

IB-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-FES-0004 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

**JAPAN** 

MB-FES-0006 Ferro-silicon 75% Si min, cif

Japan, \$/tonne

Quality: Lump. Si 75-80%; Al 2% max; P

0.05% max; S 0.02% max; C 0.2%

max; size: 10-50mm

Quantity: Min 100 tonnes Location: cif Japan Unit: USD per tonne

Payment terms: Cash or letter of credit
Publication: Weekly. Wednesday 2-3pm

London time

**EUROPE** 

MB-FES-0005 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 terms normalized
Publication: Weekly. Friday 2-3pm London time



# Silico-manganese

# Ferro-nickel

#### **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%

Min 100 tonnes Quantity:

Location: Delivered consumer works Europe

EUR/tonne Unit

Payment terms: Cash, other terms normalized Publication: Weekly. Friday 2-3pm London time

#### **CHINA**

MB-SIM-0001 Silico-manganese 65% Mn min,

max 17% Si, in-whs China,

yuan/tonne

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

CNY/tonne, all Mn grades normalized Unit:

to 65% basis on pro rata basis

Payment terms: Cash, other terms normalized

Publication: Weekly. Friday 5-6pm Shanghai time

#### **CHINA**

MB-FEN-0003 Ferro-nickel premium/discount,

26-32% Ni contained, cif China,

\$/tonne

Ni typical 30% (range 26%-32%), P Quality:

0.0045% max, S 0.060% max

Quantity: Min 100 nickel metal tonnes per lot

cif China Location: USD/tonne Unit:

Payment terms: Cash, other payment terms

normalized

Publication: Fortnightly, Monday 7pm Shanghai

Notes: Ferro-nickel price = (LME Ni price +

premium/ discount) x nickel content

MB-FEN-0006

Ferro-nickel 20-25% nickel

contained, outright price, cif China, \$/tonne

Quality: Ferro-nickel, 20-25% Ni, S 0.07%

max, P 0.05% max

Min 100 nickel metal tonnes per lot Quantity:

> Location: CIF China Unit: USD/tonne

Payment terms: Cash, other payment terms

normalized

Publication: Fortnightly, Monday 7pm Shanghai

Notes: In the absence of data, Fastmarkets

> will calculate this price based upon the premium/discount to London Metal Exchange nickel price.

**INDIA** 

MB-SIM-0004 Silico-manganese 65% Mn min,

min 16% Si, fob India, \$/tonne

Quality: Lump. Mn: 65% Si: 16% C: 2%

> P:0.35% S:0.03% Min 100 tonnes

Quantity: Location: fob India Unit: USD/tonne Payment terms: Letter of Credit

Publication: Weekly. Friday 2-3pm London time MB-FEN-0007

Ferro-nickel 20-25% nickel contained, premium/discount,

cif China, \$/tonne

Quality: Ferro-nickel, 20-25% Ni, S 0.07%

max, P 0.05% max

Quantity: Min 100 nickel metal tonnes per lot

CIF China Location: USD/tonne Unit:

Payment terms: Cash, other payment terms

Publication: Fortnightly, Monday 7pm Shanghai

time

#### **UNITED STATES**

MB-SIM-0003 Silico-manganese 65% Mn min, min

16% Si, in-whs Pittsburgh, US cents/lb

Manganese min 65%, Si min 16% Quality:

Quanity: 20 tons

Location: In-warehouse Pittsburgh Unit: US cents per pound Publication: Weekly. Thursday



# Nickel Pig Iron

#### **CHINA**

MB-FEN-0001 Nickel pig iron, high-grade NPI

content 10-15%, contract, ddp China, yuan/nickel unit price

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 London time Notes: Packaged in 1-tonne big bags

MB-FEN-0002 Nickel pig iron, high-grade NPI

content 10-15%, spot, ddp China,

yuan/nickel unit price

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 London time

Notes: Packaged in 1-tonne big bags

MB-FEN-0005 Nickel pig iron, 10-14% ni content,

FOB Indonesia, \$/nickel unit

Quality: lump, Ni 10-14%, Fe 80%, P 0.04%

max, S 0.4% max, Si 4.5% max, C  $\,$ 

4% max

Quantity: min 500 tonnes

Location: fob main ports Indonesia

Timing: Spot

Unit: US Dollar/nickel unit

Payment terms: Cash

Publication: Daily, 4pm London

# 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 Ib Mo

Payment terms: Cash; other terms normalized

Publication: Daily. 2-3pm 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: Daily. 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 5 tonnes
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 5 tonnes
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: Daily. 2-3pm London time

**UNITED STATES** 

MB-FET-0002 Ferro-titanium 68-72% Ti, ex-whs

US, \$/lb

Quality: Titanium 68-72%, Aluminium 4-5%,

Vanadium max 3%, Carbon max 0.20%,

Oxygen max 2%, Nitrogen max 0.50%

Quantity: 10 tonne min
Location: Ex-US warehouse
Unit: US dollars per lb
Packaging: Supersacks

Form: Lump

Frequency: Once a week, every Thursday

MB-TI-0004 Titanium ingot 6AI-4V, fob shipping point US, \$/Ib

Quality: 6Al-4V (aluminum 6%, vanadium

4%, titanium remainder)

Location: fob shipping point
Unit: US dollars per lb

Publication: Quarterly on the 10th of the month

by 5pm New York 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 3pm London time

Tungsten

EUROPE

MB-W-0001 Tungsten APT 88.5% WO3 min

Europe, cif Rotterdam and Baltimore duty-free, \$/mtu WO3

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, 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**

#### MB-W-0003 Tungsten APT 88.5% WO3 min, fob main ports China, \$/mtu WO3

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

time

#### MB-W-0002 Tungsten concentrate 65% WO3,

in-whs China, yuan/tonne

Powder. WO3 65% min, S 0.8% max, Quality:

> 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

China Location: Unit: CNY/tonne Payment terms: Cash or 30 days

Publication: Weekly. Wednesday 2-3pm London

# Ferro-tungsten

#### **EUROPE**

MB-FEU-0001 Ferro-tungsten basis 75% W, in-

whs dup Rotterdam, \$/kg W

Lump. W 75.00% min, C 0.40% max, Quality:

> 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

Min 3-tonne lots Quantity: Location: dup Rotterdam Unit: USD per kg W

Payment terms: Cash, other payment terms

normalized

Publication: Twice weekly. Wednesday and Friday

2-3pm London time

Notes: Packaged in 1-tonne big bags

#### **CHINA**

#### MB-FEU-0003 Ferro-tungsten basis 75% W, fob

main ports China, \$/kg W

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

fob China main ports Location:

Unit: USD per kg W

Payment terms: Cash, other terms normalized Publication:

Weekly. Wednesday 2-3pm London



UNITED STATES

# Vanadium

EUROPE		MB-FEV-0002	Ferro-vanadium 70-80% V, in-whs
MB-FEV-0001	Ferro-vanadium basis 78% V min, 1st grade, ddp Western Europe, \$/	Quality: Quantity:	Pittsburgh, \$/lb V 70-80% Min 10 tons
	kg V	Location:	In-warehouse Pittsburgh
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	Unit: Publication:	USD per Ib Weekly. Thursday
Quantity: Location:	Min 5 tonnes  Delivered consumer works Europe	MB-V-0002	Vanadium pentoxide 98% V2O5 min, fob China, \$/lb V2O5
Unit:	USD per kg V	Quality:	Brown flake. V 98% min, Si, 0.25%
Payment terms: Publication:	Cash, other terms normalized Twice weekly. Wednesday and Friday at 2-3pm London time	7.	max, Fe 0.30% max, S 0.03% max, P 0.05% max, As 0.02% max, Na2+K2O 1.50% max.
		Quantity:	Min 5 tonnes (+/- 5%)
MB-V-0001	Vanadium pentoxide 98% V2O5	Location:	fob China (other delivery terms normalized)
	min, in-whs Rotterdam, \$/lb V2O5	Timing:	Within 20 days
Quality:	Brown flake. V 98% min, Si 0.25%	Unit:	\$/Ib V2O5
,	max. Fe 0.30% max, S 0.03% max. P 0.05% max, As 0.02% max, Na2+K2O	Payment terms:	L/C, T/T, other payment terms
	1.50% max	Publication:	Weekly, Thursday, 2-3pm London
Quantity:	Min 5 tonnes (+/- 5%)		time
Location:	In-warehouse Rotterdam	Notes:	Low-liquidity measures are applied
Unit:	USD per lb V2O5		when necessary
Payment terms:	Cash, other terms normalized		,
Publication:	Weekly. Friday 2-3pm London time		
		MB-V-0003	Vanadium nitrogen, basis 77%V, 16% N, ex-works China
CHINA		Quality:	Lump. V 77-81%, N 14-18%, C 6% max, P 0.06% max, S 0.10% max
MB-FEV-0003	Ferro-vanadium 78% V min, fob China, \$/kg V	Quantity: Location:	Min 20 tonnes (+/- 5%) Ex-works China
Quality:	Lump. V 78% min, Al 1.5% max, Si 2%	Unit:	CNY/tonne
addity.	max, C 0.06%, S 0.05%, P 0.05%, As	Payment terms:	Cash, other terms normalized
	0.06%, Mn 0.5%, Cu 0.1%, Ni 0.15%, Mesh size 10-50mm, 90% min.	Publication:	Weekly, Thursday, between 2pm and 3pm London time
Quantity: Location:	Min 5 tonnes (+/- 5%)		
	fob China (other delivery terms normalized)	MB-V-0004	Vanadium pentoxide 98% V2O5
Timing:	Within 20 days		min, ex-works China
Unit:	\$/kg V	Quality:	Brown flake. V 98% min, Si, 0.25%
Payment terms:	L/C, T/T, other payment terms normalized		max, Fe 0.30% max, S 0.03% max, P 0.05% max, As 0.02% max, Na2+K2O
Publication:	Weekly, Thursday 2-3pm London		1.50% max.
NI	time	Quantity:	Min 20 tonnes (+/- 5%)
Notes:	Low-liquidity measures are applied	Location:	Ex-works China
	when necessaryi	Unit:	CNY/tonne
		Payment terms: Publication:	Cash, other terms normalized Weekly, Thursday, between 2pm and

www.fastmarkets.com 50

3pm London time



# Ferro-niobium

MB-FN-0001 Ferro-niobium 63-67%, delivered

consumer works Europe, duty

paid, \$/kg Nb

10-50mm lump. Nb 63-67%, C 0.2% Quality:

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

USD per kg Nb Unit:

Payment terms: Cash. Other payment terms

normalized

Publication: Weekly, Wednesday 2-3pm London

Notes: Packaged in 250kg drums or one-

tonne big bags

## Ores

## **Bauxite**

#### CHINA

MB-BX-0016 Bauxite, cif China, \$ per dmt

Quality: Total alumina 50%; total silica 5%; Fe

> 20% max; moisture content 7% min, 10% max; organic carbon 0.15% max

Min 40,000 tonnes Quantity:

Location: cif China

Timing: Within two months Unit: USD per dmt

Payment terms: LC (other payment terms

normalized)

Publication: Monthly; third Thursday of the

month, 3-4pm London time

Notes: Bulk carrier; accepted origins -

Guinea, Australia, Indonesia

#### LATIN AMERICA

MB-BX-0015 Bauxite, fob Trombetas, Brazil,

Total alumina 50%; total silica 5%; Fe Quality:

> 20% max; moisture content 7% min, 10% max; organic carbon 0.15% max

Quantity: Min 40,000 tonnes

Location: fob Trombetas (other ports

normalized)

Timing: Within two months Unit: USD per dmt

Payment terms: 30 days after loading (other

payment terms normalized)

Monthly; third Thursday of the Publication:

month, 3-4pm London time

Bulk carrier Notes:



# Chrome ore

# Manganese ore

#### **AFRICA**

MB-CHO-0003 Chrome ore South Africa UG2/MG

concentrates index, cif China, \$/

tonne

Quality: Up to 2mm (99% min); Cr range

40-42%; Silica max 6%; Alumina max 18%; MgO max 16%; P max 0.01%; S max 0.01%; chrome iron ratio 1.27:1-

1.35, basis 1.3:1

Quantity: Min 5,000 tonnes

Location: cif Tianjin, China (normalized for any

Chinese mainland sea port)

Unit: USD per tonne

Payment terms: Payment at sight

Publication: Weekly. Tuesday 2-3pm London time Notes: Bulk (container deals normalized)

#### **SOUTH AFRICA**

MB-MNO-0002 Manganese ore semi carbonate

index, 36.5% Mn, fob Port Elizabeth, \$ per dmtu

Quality: 5.5-75mm lump. Manganese base

36.5%, range 35-38%; iron base 5%, range 3-10%; silica base 5.5%, max 12%; phosphorus base 0.02%, max 0.05%; alumina base 0.2%, max 1.5%; moisture base 2%, 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 terms: Cash or LC on sight
Publication: Friday, 3pm London time

#### **CHINA**

#### MB-CHO-0002 Chrome ore Turkish lumpy 40-

42%, cfr main Chinese ports, \$/

tonne

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

### **CHINA**

## MB-MNO-0001 Manganese ore high grade index,

cif Tianjin, \$ per dmtu

Quality: 5.5-75mm lump. Manganese base

43.5%, range 40-47%; iron base 4.5%, max 16%; silica base 11%, max 17%; phosphorus base 0.10%, max 0.16%; alumina base 6.5%, max 14%; moisture base 5.5%, max 12%

Quantity: Min 5,000 tonnes

Location: CIF Tianjin, China (normalized for

any Chinese mainland sea port)

Timing: Within nine weeks

Unit: USD per dry metric tonne unit

Payment terms: Cash or LC on sight Publication: Friday 3pm, London



MB-MNO-0003 Manganese ore semi carbonate

index, 36.5% Mn, cif Tianjin,

\$ per dmtu

Quality: 5.5-75mm lump. Manganese base

36.5%, range 35-38%; iron base 5%, range 3-10%; silica base 5.5%, max 12%; phosphorus base 0.02%, max 0.05%; alumina base 0.2%, max 1.5%; moisture base 2%, max 12%

Quantity: Min 5,000 tonnes

Location: cif Tianjin (other mainland seaports

normalized)

Timing: Within nine weeks

Unit: US\$ per dry metric tonne unit

Payment term: Cash or LC on sight
Publication: Friday, 3pm London time

Nickel ore

CHINA

MB-NIO-0002

Quality:

Quantity:

Location:

Payment terms:

Publication:

Unit:

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

Laterite ore with 1.5% Ni content,

Nickel ore 1.5% Ni, 15-20% Fe, water

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

cif China, \$/tonne

content 30-35% 50,000 tonnes

USD per tonne

normalized

cif China

MB-MNO-0005 Manganese ore high grade

port index, fot Tianjin China,

yuan per dmtu

Quality: 5.5-75mm lump. Manganese base

43.5%, range 40-47%; iron base 4.5%, max 16%; silica base 11%, max 17%; phosphorus base 0.10%, max 0.16%; alumina base 6.5%, max 14%; moisture base 5.5%, max 12%

Quantity: Min 1,000 tonnes

Location: FOT Tianjin (China) - normalized for

any Chinese mainland sea port

Timing: Immediate

Unit: CNY per dry metric tonne unit

Payment terms: Cash or equivalent

Publication: Friday 5-6pm, Shanghai time

MB-NIO-0006 Laterite ore with 1.3% Ni content,

cif China, \$/tonne

Cash, other payment terms

Quality: Nickel ore 1.3% Ni, 15-25% Fe, Si:Mg

ratio 1.1-1.8, water content 35% max

Weekly. Friday 2-3pm London time

Quantity: min 50,000 tonnes

Location: cif China
Unit: USD per tonne

Payment terms: LC, cash, or other payment terms

normalized

Publication: Weekly. Friday 2-3pm London time

MB-MNO-0004

Manganese ore semi carbonate port index, 36.5% Mn, fot Tianjin,

China, yuan/dmtu

Quality: 5.5-75mm lump. Manganese base

36.5%, range 35-38%; iron base 5%, range 3-10%; silica base 5.5%, max 12%; phosphorus base 0.02%, max 0.05%; alumina base 0.2%, max 1.5%; moisture base 2%, max 12%

Quantity: Min 1,000 tonnes

Location: fot Tianjin (other mainland China

seaports normalized)

Timing: Immediate

Unit: Yuan per dry metric tonne unit

Payment terms: Cash or equivalent
Publication: Friday, 3pm London time



# Minor metals

Fastmarkets' antimony, arsenic, bismuth, cadmium, chromium, gallium, hafnium, indium, manganese, 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: Monthly, last Friday of the month

2-3pm London time

MB-SB-0011 Antimony 99.85% Sb min,

in-whs China, yuan/tonne

Quality: Ingot. Sb 99.85% min, As 0.05% max,

Pb 0.15% max, Bi 100ppm max, no

other elements specified.

Quantity: 10 tonnes Location: in-whs China

Timing: Spot
Unit: CNY/tonne

Payment terms: Cash, other payment terms

normalized

Publication: Weekly, Friday 7pm Shanghai 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 10 tonnes (+/-2%)

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 Ib

Payment terms: Cash, other payment terms

normalized

Publication: Twice weekly. Friday 2-3pm

London time

Notes: Original producer poly-lined steel

drums, each 50kg net, in accordance with the IMDG code and RID & ADR

rules

# **Bismuth**

#### **EUROPE**

MB-BI-0001 Bismuth 99.99% Bi min, in-whs

Rotterdam, \$/lb

Quality: Ingot. Bi 99.99%, no other elements

specified

Quantity: Min 1 tonne Location: Rotterdam

Timing: Prompt release, within ten

calendar days

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

MB-BI-0002 Bismuth 99.99% Bi min, in-whs

China, yuan/tonne

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**

Unit:

MB-CD-0001 Cadmium 99.95% min, cif global

ports, cents/lb

Quality: Sticks or ingots. Cd 99.95%, no other

elements specified

Quantity: Min 10 tonnes

Location: CIF global port basis

Timing: Prompt release, within ten

calendar days US cents per lb

Payment terms: Cash, other payment terms

normalized

Publication: Twice weekly. Wednesday and Friday

2-3pm London time

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, within ten

calendar days

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 Chinese.

Cr 99% min, Fe 0.4% max, Si 0.3% max, Al 0.3% max, Cu 0.04% max, C 0.02% max, S 0.02% max, P 0.01% max, Pb 0.005% max, Sb 0.001% max, Sn 0.001% max, Bi 0.001% max,

As 0.01% max, N 0.05% 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. Fastmarkets launched a MB-CR-00013 chromium aluminothermic assessment on May 2, 2025, to reflect 99.4% minimum material. Consequently, the long-standing MB-CR-0001 chromium price now only reflects material that meets the

99% MMTA China grade.

MB-CR-0003 Chromium alumino-thermic 99.4% min, in-whs Rotterdam,

\$/tonne

Quality: Lump or powder. Cr 99.4% min, Fe

0.35% max, Al 0.10% max, Si 0.10% max, C 0.02% max, S 0.01% max, P 0.01% max, Pb 0.001% max, Cu 0.04% max, Sb 0.001% max, Sn 0.001% max, Bi 0.001% max, As 0.01% max, N 0.05% max

Quantity: Min 10 tonnes (+/-2%)
Location: In-whs Rotterdam
Timing: Prompt release
Unit: USD per tonne

Payment terms: Cash, other terms normalized
Publication: Monthly, first Friday of the month,

between 2pm and 3pm London time

Notes: Lump form: Steel drums of uniform

net weight, usually 300kg; Powder form: Steel drums of uniform net weight, typically 250kg; Material produced via alumino-thermic

reaction

#### **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**

MB-CO-0012 Cobalt tetroxide 72.6% Co min,

delivered China, yuan/tonne

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

MB-CO-0001 Cobalt 99.8% Co min, ex-works

China, yuan/tonne

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** 

## **Non-ferrous Prices**

MB-CO-0004 Cobalt alloy grade,

in-whs Rotterdam, \$/lb

Quality: Min 99.8% cobalt metal; standard

specifications of the following brands in original packaging: Nikkelverk cut cathodes, Vale Port Colborne rounds, Vale Long Harbour alloy grade rounds (99.9% cobalt), SMM cut

cathodes, Jinchuan cut cathodes

Quantity: Minimum 1 tonne, maximum 100

tonnes

Location: In-warehouse Rotterdam,

duty-unpaid, customs uncleared

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

MB-CO-0005 Cobalt standard grade, in-whs Rotterdam, \$/lb

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), Sherritt briquettes, Vale Long Harbour standard grade rounds (99.8% cobalt), Jiangsu (KLK) cut cathodes, Huayou cut cathodes, Greatpower cut cathodes, Hanrui cut cathodes, Lygend cut cathodes, and Tengyuan cut cathodes.

Quantity: Minimum 1 tonne, maximum 100

tonnes

Location: In-warehouse Rotterdam,

duty-unpaid, customs uncleared

Timing: Within 30 days, other terms

normalized

Unit: US\$ per lb

Payment terms: Cash; other terms normalized

Publication: Daily. Monday to Friday, 3pm London

time

## Cobalt sulfate

Please see Battery Raw Materials section.

<sup>\*</sup> 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'.



## Gallium

MB-GA-0001 Gallium 99.99% Ga min,

in-whs Rotterdam, \$/kg

Quality: Ingot. Ga: 99.99% min, no other

elements specified

Min 100kg (+/- 2%) Quantity: Location: In-whs Rotterdam Timina: 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

MB-GA-0002 Gallium 99.99% Ga min,

in-whs China, yuan/kg

Quality: Ingot. Ga: 99.99% min, no other

elements specified

Min 50kg Quantity: China Location: Unit: CNY/kg

Germanium

Payment terms: Cash, other payment terms

normalized

Publication: Weekly. Friday by 3pm London time MB-GER-0006 Germanium dioxide, in-whs China,

yuan/ka

GeO2 99.99 % min, Ge 69 % approx. Quality:

White powder

Quantity: Min 100 kg (+/- 2%) Location: in-whs China Timing: Prompt release

Payment terms: Cash, other payment terms

normalized

Unit: vuan/ka

Publication: Weekly. Friday by 3pm London time Notes: Original producer cases, normally

25kg each

**EUROPE** 

MB-GER-0003 Germanium 99.999% Ge,

in-whs Rotterdam, \$/kg

Ingot. Ge 99.999%, no other Quality:

> elements specified Min 100 kg (+/- 2%)

Quantity: Location: In-whs Rotterdam Timing: Prompt release

USD/kg Unit:

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

**CHINA** 

MB-GER-0004 Germanium 99.999% Ge min,

in-whs China, yuan/kg

Quality: Ingots 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. Friday by 3pm London time MB-GER-0005 Germanium dioxide,

in-whs Rotterdam, \$ per kg

Quality: GeO2 99.99% min, Ge 69% approx.

White powder

Quantity: Min 100kg (+/- 2%) Location: in-whs Rotterdam Prompt release Timing: Unit: USD per ka

Payment terms: Cash, other payment terms

normalized

Weekly; Wednesday between 2pm Publication:

and 3pm, London time

Notes: Original producer cases, normally

25kg each.



# Hafnium

#### **GLOBAL**

MB-HF-0001 Hafnium, max 1% Zr, in-whs

global locations, \$/kg

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

#### **CHINA**

MB-IN-0003 Indium 99.99% ex-works China

CNY/kg

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. Friday between 2pm and

3pm London time

# Indium

#### **EUROPE**

MB-IN-0002 Indium 99.99%, in-whs

Rotterdam, \$/kg

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, within ten

calendar days

Unit: USD/kg

Payment terms: Cash, other terms normalized

Publication: Twice-weekly. Wednesday and Friday

2-3pm London time

Notes: Original producer wooden cases

# Magnesium

#### **EUROPE**

MB-MG-0001 Magnesium 99.9%, in-whs

Rotterdam, \$/tonne

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%) Locaton: In-whs Rotterdam

Unit: USD/tonne

Payment terms: Cash, other terms normalized

Publication: Weekly. Friday 2-3pm London time



#### **CHINA**

MB-MG-0003 Magnesium 99.9%, exw China,

yuan/tonne

Quality: Ingot. Mg 99.9% min Quantity: Min 20 tonnes (+/- 2%) Ex-works China Location:

CNY/tonne Unit: Payment terms: Cash on spot

Publication: Weekly. Friday 2-3pm London time

MB-MG-0002 Magnesium 99.9% Mg min, fob

China main ports, \$/tonne

Ingot. Mg 99.9% min Quality: 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

MB-MG-0005 Magnesium, 99.9% min, ex-whs Baltimore, US cents/lb

Ingots and sticks. Mg 99.9% min, Quality:

> 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, conforming to ASTM specifications B92/92M-11

and 9990A

Quantity: 20 tonnes

Ex-warehouse Baltimore Location:

Within 30 days Timing: US cents per lb Units:

Publication: Monthly, first Thursday of the month Manganese

**EUROPE** 

MB-MN-0001 Manganese 99.7% electrolytic

manganese flake, in-whs

Rotterdam, \$/tonne Flake. Mn: 99.7% S: 500 ppm max Quality:

P: 50 ppm max C: 400 ppm max

Fe+Se+Si: 0.205% max

Min 25 tonnes (+/-2%) Quantity:

Location: Rotterdam

Timing: Prompt, within ten calendar days

Unit: USD/tonne

Cash, other payment terms 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

Flake. Min 99.7% manganese Quality:

Quantity: Min 10 tonnes Location: Ex-warehouse, US Unit: USD per pound

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

Flake; Mn: 99.7% basis; S: 500 Quality:

> 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

fob China main ports Location: Timing: Spot, within one week Unit: USD per tonne

Payment terms: TT or LC

Publication: Weekly. Friday 2-3pm London time



# 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/ka

Delivery time: Within one calendar month
Payment terms: Cash, other terms normalized
Publication: Fortnightly. Friday 2-3pm London time
Notes: Uniform IMDG-approved containers.

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/Ib

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** 

Quantity:

MB-SE-0002 Selenium 99.5% Se min, in-whs

Rotterdam, \$/Ib

Quality: Powder of minus 200 mesh or

granules sizing 1-5 mm. Se 99.5% min, no other elements specified

Min 250kg (+/-2%)

Location: In-whs Rotterdam

Timing: Prompt release, within ten

calendar days

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** 

MB-SE-0003 Selenium 99.9% Se min, in-whs

China, yuan/kg

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/ka

Unit: CNY/kg
Payment terms: Cash, other payment terms

normalized

Publication: Weekly. Friday by 3pm London time

## Silicon

### **EUROPE**

MB-SI-0001 Silicon grade 4-4-1 99% Si min,

in-whs Rotterdam, €/tonne

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



MB-SI-0004 Silicon grade 5-5-3 98.5% Si min,

in-whs Rotterdam, €/tonne

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** 

MB-SI-0002 Silicon export 98.5% Si min,

fob China, \$/tonne

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: T

Publication: Weekly. Friday 2-3pm London time

**UNITED STATES** 

MB-SI-0003 Silicon, ddp US, US cents/lb

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** 

MB-TA-0001 Tantalite, basis min 25% Ta2O5,

cif China

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** 

MB-TE-0001 Tellurium 99.9-99.99% Te min,

in-whs Rotterdam, \$/kg

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 release, within ten

calendar days

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** 

MB-TE-0002 Tellurium 99.99% Te min, in-whs

China, yuan/kg

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 MB-CO-0021

Quality:

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

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). Min 50 tonnes (cobalt content) cif China (other terms normalized)

Quantity: Location: Timing: 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

Where the publication day falls on a public holiday in China, the assessment will be rolled over from

previous pricing session.

# Cobalt sulfate

#### **CHINA**

MB-CO-0017 Cobalt sulfate 20.5% Co basis,

exw China, yuan/tonne

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

On bank acceptance (other terms Payment terms:

normalized)

Publication: Twice weekly. Wednesday and Friday,

2-3pm London time

# Cobalt hydroxide

#### **CHINA**

MB-CO-0020 Cobalt hydroxide 30% Co min, cif China, \$/lb

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

Quantity: Min 50 tonnes (cobalt content) Location: cif China (other terms normalized)

Timing: within 45 days Unit: USD/lb

Payment terms: Letter of credit at sight, current price

month ('M')

Publication time: Daily, 2-3pm London time

## MB-CO-0023

Publication:

Notes:

Notes:

### Cobalt hydroxide, min 30% Co, inferred, China, \$ per lb

Daily. Monday to Friday, 3.30pm London time

Where the publication day falls on a public holiday in England and Wales, the assessment will not be published. The daily cobalt hydroxide inferred price is calculated as the low-end price of the Fastmarkets standard grade cobalt assessment multiplied by the prevailing midpoint of the Fastmarkets cobalt hydroxide payable (percentage) indicator, min

30% Co, cif China.



# Cobalt MHP

MB-CO-0024 Cobalt mixed hydroxide

precipitate payable indicator, % cobalt metal standard grade in-whs Rotterdam, cif China,

Japan, and South Korea

Quality: 30-45% nickel min/max, 1-6% cobalt

min/max, 4% Zn max, 4% Cu max, 9% Mn max, 5% Mg max, 5% S max, 0.5% Fe max, moisture content 35-

40%

Quantity: Min 100 tonnes

Location: cif major ports China, Japan and

South Korea (other ports normalized)

Timing: 45 days

Unit: % of cobalt metal standard grade

in-whs Rotterdam

Publication: Daily, 4pm London time

MB-CO-0025 Cobalt mixed hydroxide

precipitate, outright price, cif China, Japan, and South Korea,

\$/tonne

Quality: 30-45% nickel min/max, 1-6% cobalt

min/max, 4% Zn max, 4% Cu max, 9% Mn max, 5% Mg max, 5% S max, 0.5% Fe max, moisture content 35-

40%

Quantity: Min 100 tonnes

Location: cif major ports China, Japan and

South Korea (other ports normalized)

Timing: 45 days

Unit: USD per tonne, inferred basis of

the payable range or expressed by

participants

Publication: Daily, 4pm London time

Notes: In the absence of data, Fastmarkets

will calculate this price, based upon the payable level to the cobalt metal standard grade, in-whs Rotterdam

price of that day

# Iron phosphate

**CHINA** 

MB-FEP-0001 Iron phosphate anhydrous

0.96-0.98 Fe/P, battery grade, delivered China, yuan/tonne

Quality: Fe/P 0.96-0.98, accepted by buyers

for use in battery applications

Quantity: Min 30 tonnes
Location: Delivered China

(China's 13% VAT included)

Delivery window: Within 30 days
Unit: yuan/tonne
Payment terms: Bank acceptance

(other terms normalized)

Publication: Weekly, Friday 4pm London time

## Lithium

# Lithium carbonate battery grade spot price

#### CHINA, JAPAN & SOUTH KOREA

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: Li2CO3 99.5% min (Min. 99.2% Li2CO3 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: Daily, 1pm London time



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

Quality: Powder, accepted by buyer for use

in battery applications and with the chemical composition: Li2CO3 99.5% min; Na 0.025% max; Ca 0.005% max; Mg 0.008% max; magnetic

impurities 300ppb max

Quantity: Min 5 tonnes

Location: Ex-works China, VAT included

Timing: 30 days
Unit: CNY/tonne

Publication: Daily. 7pm Shanghai time

**EUROPE** 

MB-LI-0023 Lithium carbonate 99.5% Li₂CO₃

min, battery grade, spot price

ddp Europe, \$/kg

Quality: Powder, accepted by buyer for use in battery applications and with the

chemical composition: Li2CO3 99.5% min (Min. 99.2% Li2CO3 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 Europe
Timing: 30 days
Unit: USD/kq

Publication: Weekly, Thursday 3-4pm London

time

**NORTH AMERICA** 

MB-LI-0044 Lithium carbonate 99.5% Li2CO3

min, battery grade, spot price ddp US and Canada, \$ per kg

Quality: Powder, accepted by buyer for use

in battery applications and with the chemical composition: Li2CO3 99.5% min (Min. 99.2% Li2CO3 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 & Canada

Timing: 30 days
Unit: USD per kg

Publication: Weekly, Thursday 10-11am NY time

Lithium hydroxide monohydrate battery grade spot price

**CHINA, JAPAN & SOUTH KOREA** 

MB-LI-0033 Lithium hydroxide monohydrate

LiOH.H<sub>2</sub>O, 56.5% LiOH min,, battery grade, spot price cif China, Japan & Korea, \$/kg

Quantity: Min 5 tonnes

Quality: Powder, accepted by buyer for use

in battery applications and with the chemical composition LiOH 56.5% min; CO2 <0.35%; Ca 0.020% max; SO4 0.015% max; CI- 0.005% max

Quantity: Min 5 tonnes

Location: cif main Chinese Japanese &

South Korean ports (other ports

normalized)

Timing: 60 days
Unit: USD/kg

Publication: Daily, 1pm London time



MB-LI-0040 Lithium hydroxide monohydrate

LiOH.H₂O, 56.5% LiOH 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 56.5% min; CO2 <0.35%; Ca 0.005% max; SO4 0.01% max; CI- 0.002% max

Quantity: Min 5 tonnes

Location: Ex-works China, VAT included

Timing: 30 days
Unit: CNY/tonne

Publication: Daily. 7pm Shanghai time

**EUROPE** 

MB-LI-0025 Lithium hydroxide monohydrate

LiOH.H<sub>2</sub>O, 56.5% LiOH min, battery grade, spot price ddp

Europe, \$/kg

Quality: Powder, accepted by buyer for use

in battery applications and with the chemical composition LiOH 56.5% min; CO2 <0.35%; Ca 0.020% max; SO4 0.015% max; CI- 0.005% max

Quantity: Min 5 tonnes
Location: ddp Europe
Timing: 30 days
Unit: USD/kg

Publication: Weekly, Thursday, 3-4pm London

time

**NORTH AMERICA** 

MB-LI-0045 Lithium hydroxide monohydrate

LiOH.H2O, 56.5% LiOH min, battery grade, spot price ddp US

and Canada, \$ per kg

Quality: Powder, accepted by buyer for use

in battery applications and with the chemical composition LiOH 56.5% min; CO2 <0.35%; Ca 0.020% max; SO4 0.015% max; CI- 0.005% max

Quantity: Min 5 tonnes
Location: ddp US & Canada

Timing: 30 days
Unit: USD per kg

Publication: Weekly, Thursday 10-11am NY time

Lithium carbonate technical & industrial grade, spot price

**CHINA** 

MB-LI-0034 Lithium carbonate 99% Li2CO3

min, technical and industrial grade, spot price range exw domestic China, yuan/tonne

Quality: Min 99% Li2CO3 (qualified for

use in technical and industrial

applications). Powder

Quantity: Min 5 tonnes

Location: Ex-works China, VAT included

Timing: 30 days
Unit: CNY/tonne

Publication: Weekly, Thursday, 3-4pm London

time

CHINA, JAPAN & SOUTH KOREA

MB-LI-0028 Lithium carbonate 99% Li2CO3

min, technical and industrial grades, spot price cif China,

Japan & Korea, \$/kg

Quality: Min 99% Li2CO3 (qualified for

use in technical and industrial

applications). Powder

Quantity: Min 5 tonnes

Location: cif China, Japan & South Korea

Timing: 60 days
Unit: USD/kg

Publication: Weekly, Thursday, 3-4pm London time

**EUROPE** 

MB-LI-0019 Lithium carbonate 99% Li2CO3

min, technical and industrial grades, spot price ddp Europe, \$/kg

Quality: Min 99% Li2CO3 (qualified for

use in technical and industrial

applications). Powder

Quantity: Min 5 tonnes
Location: ddp Europe
Timing: 30 days
Unit: USD/ka

Publication: Weekly, Thursday, 3-4pm London

time



#### **NORTH AMERICA**

MB-LI-0046 Lithium carbonate 99% Li2CO3

min, technical and industrial grades, spot price ddp US and

Canada, \$ per kg

Quality: Min 99% Li2CO3 (qualified for

use in technical and industrial

applications), powder

Quantity: Min 5 tonnes

Location: ddp US and Canada

Timing: 30 days
Unit: USD per kg

Publication: Weekly, Thursday, 10-11am NY time

#### **EUROPE**

MB-LI-0021 Lithium hydroxide monohydrate

LiOH.H<sub>2</sub>O, 56.5% LiOH min, technical and industrial grades,

spot price ddp Europe, \$/kg

Quality: LiOH 56.5% min (qualified for

use in technical and industrial

applications). Powder

Quantity: Min 5 tonnes Location: ddp Europe & US

Timing: 30 days
Unit: USD/kg

Publication: Weekly, Thursday 3-4pm London

time

# Lithium hydroxide monohydrate technical & industrial grade, spot price

#### **CHINA, JAPAN & SOUTH KOREA**

MB-LI-0032 Lithium hydroxide monohydrate

LiOH.H<sub>2</sub>O, 56.5% LiOH min, technical and industrial grades, spot price cif China, Japan &

Korea, \$/kg

Quality: LiOH 56.5% min (qualified for

use in technical and industrial

applications). Powder

Quantity: Min 5 tonnes

Location: cif China, Japan & South Korea

Timing: 60 days Unit: USD/kg

Publication: Weekly, Thursday 3-4pm London

time

#### **NORTH AMERICA**

MB-LI-0047 Lithium hydroxide monohydrate

LiOH.H2O, 56.5% LiOH min, technical and industrial grades, spot price ddp US and Canada,

\$ per kg

Quality: LiOH 56.5% min (qualified for

use in technical and industrial

applications), powder

Quantity: Min 5 tonnes

Location: ddp US and Canada

Timing: 30 days
Unit: USD per kg

Publication: Weekly, Thursday, 10-11am NY time



# Spodumene

#### **CHINA**

MB-LI-0012 Spodumene min 6% Li2O, spot

price, cif China, \$/tonne

Quality: A mineral concentrate accepted

by buyers for conversion in

lithium chemicals used in battery applications (any size will be accepted) and with the following chemical composition: Li2O 6% (min 5.0% Li2O and max 6.1% Li2O accepted if it can be normalized to 6%); Fe2O3 < 1.3% (max 1.5% Fe2O3 accepted if it can be normalized to <

1.3%), H2O < 10%

Quantity: minimum 3,000 tonnes

Location: cif China
Timing: 90 days
Unit: USD/tonne

Publication: Daily, 1pm London time

# Graphite

#### **CHINA**

MB-GRA-0036 Graphite spherical 99.95% C,

15-17 microns, fob China, \$/tonne

Quality: 99.95% C, 15-17 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 time

#### MB-LI-0043

# Spodumene min 6% Li2O, contract price, cif China, \$/tonne

Quality: A mineral concentrate accepted

by buyers for conversion in lithium chemicals used in battery applications (any size will be accepted) and with the following chemical composition: Li2O 6% (min 5.0% Li2O and max 6.1% Li2O accepted if it can be normalized to 6%); Fe2O3 < 1.3% (max 1.5% Fe2O3 accepted if it can be normalized to <

1.3%), H2O < 10%

Quantity: 5,000 tonnes
Location: cif China
Timing: up to 1 year
Unit: USD/tonne

Publication: Monthly, last Wednesday of the

month, 3-4pm London time

## **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

Location: ex-works mainland China - excludes

Taiwan Region, HK SAR and Macao

SAR

Timing: Within 30 days
Unit: CNY/tonne

Payment terms: Bank acceptance (other payments

normalized)

Publication: Weekly. Friday 3-4pm London time



EAST ASIA, SOL	JTHEAST ASIA	MB-NI-0254	Nickel sulfate premium, in-whs Rotterdam, \$/tonne
MB-NI-0246	Nickel sulfate, cif Japan and Korea, \$/tonne	Quality:	Accepted by buyer for use in battery applications with chemical
Quality:	Accepted by buyer for use in battery applications with chemical composition: Ni content, base 22.3% max, min 22%, cobalt 50ppm max		composition: Ni content, base 22.3%, min 22%, cobalt 50ppm max, other impurities 5ppm max (copper, iron, zinc, etc).
Quantity:	Min 1 tonne	Quantity:	Min 1 tonne
Location:	cif major ports Japan, Korea (other ports normalized)	Location: Timing:	In-whs Rotterdam Within 60 days.
Timing:	Within 60 days	Unit:	USD/tonne
Unit:	USD/tonne	Publication:	Monthly, first Friday of month, 4pm
Publication:	Weekly. Friday, 4pm London time		London time
MB-NI-0247	Nickel sulfate premium, cif Japan, and Korea, \$/tonne	Nickel	MHP
Quality:	Accepted by buyer for use in		

MB-NI-0247	Nickel sulfate premium, cif Japan, and Korea, \$/tonne	Nickel	МН
Quality:	Accepted by buyer for use in battery applications with chemical		
	composition: Ni content, base 22.3% max, min 22%, cobalt 50ppm max	MB-NIO-0003	Nickel n
Quantity:	Min 1 tonne		and Sou
Location:	cif major ports Japan, and Korea, on top of weekly average LME nickel cash price	Quality:	30-45% min/max 9% Mn n
Timing:	Within 60 days		0.5% Fe
Unit:	USD/tonne		40%
Publication:	Weekly. Friday, 4pm London time	Quantity: Location:	min 100 cif major South Ko
FUROPE		Timina:	45 days

EUROPE	
MB-NI-0253	Nickel sulfate, in-whs Rotterdam,

\$/tonne
Accepted by buyer for use in
battery applications with chemical
composition: Ni content, base 22.3%
min 22%, cobalt 50ppm max, other
impurities 5ppm max
(copper, iron, zinc, etc).

Quantity:	Min 1 tonne
Location:	In-whs Rotterdam
Timing:	Within 60 days.
Unit:	USD/tonne

Quality:

Publication: Monthly, first Friday of month, 4pm

London time.

MB-NIO-0003	Nickel mixed hydroxide precipitate outright price, cif China, Japan and South Korea, \$ per tonne
Quality:	30-45% nickel min/max, 1-6% cobalt min/max, 4% Zn max, 4% Cu max, 9% Mn max, 5% Mg max, 5% S max, 0.5% Fe max, moisture content 35-40%
Quantity:	min 100 tonnes
_ocation:	cif major ports China, Japan and South Korea (other ports normalized)
Timing:	45 days
Jnit:	USD per tonne, inferred basis the payable range or expressed by participants

MB-NIO-0004	Nickel mixed hydroxide precipitate
	payable indicator, % London
	Metal Exchange, cif China, Japan

and South Korea

Weekly, Friday 3-4pm London time

Quality: 30-45% nickel min-max, 1-6% cobalt min-max, 4% Zn max, 4% Cu max, 9% Mn max, 5% Mg max, 5% S max, 0.5% Fe max, moisture content 35-

40%

Quantity: min 100 tonnes

Location: cif major ports China, Japan and

South Korea (other ports normalized)

Timing: 45 days

Publication:

Unit: % payable basis LME monthly

average

Publication: Weekly, Friday 3-4pm London time



MB-NIO-0005 Nickel mixed hydroxide

> precipitate, outright price, FOB Indonesia, \$/tonne

Quality: 30-45% nickel min/max, 1-6% cobalt

> min/max, 4% Zn max, 4% Cu max, 9% Mn max, 5% Mg max, 5% S max, 0.5% Fe max, moisture content 35-

40%

Quantity: Min 100 tonnes

Location: fob main ports Indonesia

Timing: 45 days

Unit: USD per tonne, inferred basis of the

CIF CJK MHP price or expressed by

participants

Publication: Daily, 4pm London time

# Nickel matte

MB-NI-0257 High-grade nickel matte

> payable indicator, 65-75% nickel contained, cif China, % of official

exchange price

Quality: Nickel matte, Ni 65-75%, Fe 6% max

Quantity: Min 100 tonnes Location: CIF main ports China

Unit: Calculated as a percentage of the

> prevailing exchange-traded Class I nickel reference price published each

business day.1"

Publication: Last Friday of the month, 7pm China

<sup>1</sup> The current reference is LME Nickel Cash Official, freely available at www.lme.com.

# Manganese Sulfate

#### **CHINA**

Quantity:

MB-MN-0008 Manganese sulfate 32% Mn min,

battery grade, ex-works mainland

China, yuan/tonne

Quality: Powder, accepted by buyer for use

> in battery applications and with the chemical composition Mn 32% min, Fe 0.001% max, Zn 0.001% max, Cu 0.001% max, Pb 0.001% max, Cd 0.0005% max, K 0.01% max, Na 0.01% max, Ca 0.01% max, Mg 0.01% max, Ni 0.005% max, Co 0.005% max, insoluble residue 0.01% max,

PH 4.0-6.5 Min 32 tonnes

Location: ex-works mainland China-excludes

Taiwan Region, Hong Kong SAR and

Macao SAR

Timing: Within 30 days Unit: yuan/tonne

Payment terms: Cash, other terms normalized Publication:

Weekly. Thursday 2-3pm London

time



Scrap

Black mass

MB-BMS-0001 Black mass, NCM/NCA, payable

indicator, nickel, cif South Korea, % payable of LME Nickel Cash

Official price

Quality: Nickel and cobalt-rich black mass

composed with metal content of 15-25% nickel, 5-15% cobalt, 3-5% lithium, max 2% aluminium, max 2%

copper. Minimum total cobalt and nickel content of 20%.

Quantity: min one container load

Location: Cost insurance and freight (CIF) main

ports, South Korea. Data points for South Korean domestic trade may be normalized based on information provided by market participants.

Timing: 45 days

Unit: % payable of LME Nickel Cash

Official price

Payment terms: Letter of credit

Publication: Weekly, Wednesdays 6-7pm

Singapore time

Notes: Material must be dried and

free-flowing

MB-BMS-0002 Black mass, NCM/NCA, payable

indicator, cobalt, cif South Korea, % payable of Fastmarkets' standard-grade cobalt price

(low-end)

Quality: Nickel and cobalt-rich black mass

composed with metal content of 15-25% nickel, 5-15% cobalt, 3-5% lithium, max 2% aluminium, max 2% copper. Minimum total cobalt and

nickel content of 20%.

Quantity: min one container load

Location: Cost insurance and freight (CIF) main

ports, South Korea. Data points for South Korean domestic trade may be normalized based on information

provided by market participants.

Timing: 45 days

Unit: % payable of Fastmarkets' standard-

grade cobalt price (low-end)

Payment terms: Letter of credit

Publication: Weekly, Wednesdays 6-7pm

Singapore time

Notes: Material must be dried and

free-flowing

MB-BMS-0004 Black mass, NCM/NCA, payable

indicator, nickel, domestic, exw Europe, % payable LME Nickel

cash official price

Quality: Nickel and cobalt-rich black mass

composed with metal content of 15-25% nickel, 5-15% cobalt, 3-5% lithium, max 2% aluminium, max 2% copper. Minimum total cobalt and

nickel content of 20%

Quantity: min one truckload Location: ex works EU producer

Timing: 45 days

Unit: % payable of LME Nickel Cash

Official price

Payment terms: Letter of credit

Publication: Weekly, Wednesdays 4pm London

time



MB-BMS-0003 Black mass, NCM/NCA, payable

indicator, lithium, cif South Korea, % payable Fastmarkets' lithium carbonate 99.5% Li2CO3 min, battery grade, spot prices cif

China, Japan & Korea

Quality: Nickel- and cobalt-rich black mass

composed with metal content of 15-25% nickel, 5-15% cobalt, 3-5% lithium, max 2% aluminium, max 2% copper. Minimum total cobalt and

nickel content of 20%

Quantity: Min one container load

Location: Cost insurance and freight (CIF) main

ports, South Korea. Data points for South Korean domestic trade may be normalized based on information

provided by market participants

Timing: 45 days

Unit: % payable of Fastmarkets' lithium

carbonate 99.5% Li2CO3 min, battery grade, spot prices, cif China,

Japan & Korea, \$ per kg

Payment terms: Letter of credit

Publication: Weekly, Wednesdays 6-7pm

Singapore time

Notes: Material must be dried and

free-flowing

MB-BMS-0005 Black mass, NCM/NCA, payable

indicator, cobalt, domestic, exw Europe, % payable Fastmarkets' standard-grade cobalt price

(low-end)

Quality: Nickel and cobalt-rich black mass

composed with metal content of 15-25% nickel, 5-15% cobalt, 3-5% lithium, max 2% aluminium, max 2% copper. Minimum total cobalt and

nickel content of 20%.

Quantity: min one truckload Location: ex works EU producer

Timing: 45 days

Unit: % payable of Fastmarkets' standard-

grade cobalt price (low-end)

Payment terms: Letter of credit

Publication: Weekly, Wednesdays 4pm London

time

MB-BMS-0006 Black mass, LCO, payable

indicator, cobalt, domestic, exw Europe, % payable Fastmarkets' standard-grade cobalt price

(low-end)

Quality: High-cobalt black mass composed

with metal content of 20-30% cobalt, 3-5% lithium, max 2% aluminium, max 2% copper. min one container load

Quantity: min one container load Location: ex works EU producer

Timing: 45 days

Unit: % payable of Fastmarkets' standard-

grade cobalt price (low-end)

Payment terms: Letter of credit

Publication: Weekly, Wednesdays 4pm London

time

MB-BMS-0007 Black mass, NCM/NCA, payable

indicator, nickel, cif Southeast Asia, % payable LME Nickel cash

official price

Quality: Nickel and cobalt-rich black mass

composed with metal content of 15-25% nickel, 5-15% cobalt, 3-5% lithium, max 2% aluminium, max 2% copper. Minimum total cobalt and

nickel content of 20%

Quantity: min one container load

Location: Cost insurance and freight (CIF) main

ports, Southeast Asia.

Timing: 45 days

Unit: % payable of LME Nickel Cash

Official price

Payment terms: Letter of credit

Publication: Weekly, Wednesdays 6-7pm

Singapore time

Notes: Material must be dried and

free-flowing



MB-BMS-0008 Black mass, NCM/NCA, payable

indicator, cobalt, cif Southeast Asia, % payable Fastmarkets' standard-grade cobalt price

(low-end)

Quality: Nickel and cobalt-rich black mass

composed with metal content of 15-25% nickel, 5-15% cobalt, 3-5% lithium, max 2% aluminium, max 2% copper. Minimum total cobalt and

nickel content of 20%. min one container load

Location: Cost insurance and freight (CIF) main

ports, Southeast Asia.

Timing: 45 days

Quantity:

Unit: % payable of Fastmarkets' standard-

grade cobalt price (low-end)

Payment terms: Letter of credit

Publication: Weekly, Wednesdays 6-7pm

Singapore time

Notes: Material must be dried and

free- flowing

MB-BMS-0009 Black mass, NCM/NCA, payable

indicator, lithium, cif Southeast Asia, % payable Fastmarkets' lithium carbonate 99.5% Li2CO3 min, battery grade, spot prices

cif China, Japan & Korea

Quality: Nickel and cobalt-rich black mass

composed with metal content of 15-25% nickel, 5-15% cobalt, 3-5% lithium, max 2% aluminium, max 2% copper. Minimum total cobalt and

nickel content of 20%.

Quantity: min one container load

Location: Cost insurance and freight (CIF) main

ports, Southeast Asia.

Timing: 45 days

Unit: % payable of Fastmarkets' lithium

carbonate 99.5% Li2CO3 min, battery grade, spot prices cif China,

Japan & Korea

Payment terms: Letter of credit

Publication: Weekly, Wednesdays 6-7pm

Singapore time

Notes: Material must be dried and

free- flowing

MB-BMS-0010 Black mass, LCO, payable

indicator, cobalt, cif South Korea, % payable Fastmarkets' standard-grade cobalt price

(low-end)

Quality: High-cobalt black mass composed

with metal content of 20-30% cobalt, 3-5% lithium, max 2% aluminium, max 2% copper.

Quantity: min one container load

Location: Cost insurance and freight (CIF) main

ports, South Korea

Timing: 45 days

Unit: % payable of Fastmarkets' standard-

grade cobalt price (low-end)

Payment terms: Letter of credit

Publication: Weekly, Wednesdays 6-7pm

Singapore time

Notes: Material must be dried and

free- flowing

MB-BMS-0011 Black mass, LCO, payable

indicator, lithium, cif South Korea, % payable Fastmarkets' lithium carbonate 99.5% Li2CO3 min, battery grade, spot prices cif China, Japan & Korea)

Quality: High-cobalt black mass composed

with metal content of 20-30% cobalt, 3-5% lithium, max 2% aluminium, max 2% copper. min one container load

Location: Cost insurance and freight (CIF) main

cost insurance and freight (CIF) main

ports, South Korea.

Timing: 45 days

Quantity:

Unit: % payable of Fastmarkets' lithium

carbonate 99.5% Li2CO3 min, battery grade, spot prices cif China,

Japan & Korea

Payment terms: Letter of credit

Publication: Weekly, Wednesdays 6-7pm

Singapore time

Notes: Material must be dried and

free- flowing



MB-BMS-0012

Black mass, NCM/NCA, inferred, cif South Korea, \$/tonne

Publication: Daily. Monday to Friday, 4:30pm

London time Notes:

Where the publication day falls on a public holiday in England and Wales, the assessment will not be published. The calculation for the price assessment MB-BMS-0012 Black mass, NCM/NCA, inferred, cif South Korea, \$/tonne is as below ('X' means 'multiplied by'): Inferred nickel component: Midpoint Fastmarkets' black mass, NCM/ NCA, payable indicator, nickel, cif South Korea X midpoint LME nickel cash official price X nickel midpoint content in NCM black mass methodology (20%). Inferred cobalt component: Midpoint Fastmarkets' black mass, NCM/NCA, payable indicator, cobalt, cif South Korea X Fastmarkets' standard grade cobalt price (low-end) X cobalt midpoint content in NCM black mass methodology (10%). Inferred lithium component: Midpoint Fastmarkets' black mass, NCM/NCA, payable indicator, lithium, cif South Korea X Fastmarkets' lithium carbonate 99.5% Li2CO3 min, battery grade, spot prices cif China, Japan & Korea X lithium metal conversion rate X lithium midpoint content in NCM

black mass methodology (4%).

The lithium conversion rate for

metal from carbonate used in the

calculation is 5.323, based on data

provided by market participants.

MB-BMS-0013

Black mass, NCM/NCA, inferred, exw Europe, \$/tonne

Publication: Daily. Monday to Friday, 4:30pm

London time

Notes: Where the publication day falls on

a public holiday in England and Wales, the assessment will not be published. The calculation for the price assessment MB-BMS-0013 Black mass, NCM/NCA, inferred, exw Europe, \$/tonne is as below ('X' means 'multiplied by'): **Inferred** nickel component: Midpoint

Fastmarkets' black mass, NCM/NCA, payable indicator, nickel, exw Europe X midpoint LME nickel cash official price X nickel midpoint content in NCM black mass methodology (20%). Inferred cobalt component: Midpoint Fastmarkets' black mass, NCM/NCA, payable indicator, cobalt, exw Europe X Fastmarkets' standard grade cobalt price (low-end) X cobalt midpoint content in NCM black mass methodology (10%).

MB-MBS-0014

Black mass, NCM/NCA, payable indicator, nickel, domestic, exw USA, % payable LME Nickel cash official price

Nickel and cobalt-rich black mass Quality:

composed with metal content of 15-25% nickel, 3-13% cobalt, max 2% aluminium, max 2% copper, max 5%

fluorine, max 1% iron

Quantity: min 1 tonne

Location: Ex-works United States

45 days Timing:

Unit: Payment terms:

Publication: Notes:

% payable of LME nickel cash price Letter of credit, current price month Weekly, Wednesdays 4-5pm EST Total cobalt and nickel content to be 18-38% min/max. Material with impurities above 2% but not exceeding 5% for aluminium and

copper may be accepted dependant on liquidity levels and reporter's

discretion



Guality: Nickel and cobolt-rich black mass composed with metal content of 15-25% nickel, 3-13% cobolt, accepted metal content of 15-25% nickel, 3-13% cobolt, accepted metal content of 15-25% nickel, 5-10% cobolt, 3-5% lithium. Minimum total cobolt and nickel content of 20% nickel content of 20% nickel, 3-13% cobolt, 3-5% lithium. Minimum total cobolt and nickel content of 20% nickel duty poid Chinese consumer (low-end) Triming: 45 days  Unit: % payable of Fastmarkets' standard-grade cobolt price, in whs Rotterdam (low-end) Total cobolt and nickel content to be 18-38% min/max. Material with impurities obove 25% but not exceeding 5% for aluminium and copper may be accepted dependant on liquidity levels and reporter's discretion  MB-BMS-0016  MB-BMS-0018  MB-BMS-00	MB-MBS-0015	Black mass, NCM/NCA, payable indicator, cobalt, domestic, exw USA, % payable Fastmarkets' standard-grade cobalt price	MB-BMS-0017	Black mass, NCM, payable indicator, cobalt, ddp China, % payable Fastmarkets' cobalt sulfate 20.5% Co basis, exw China
Guantity: Ex-works United States Timing: 45 days Unit: % payable of Fastmarkets' standard-d grade cobalt price, in whs Rotterdam (low-end) Poyment terms: Letter of credit, current price month Veekly, Wednesdays 4-5pm EST Total cobalt and nickel content to be 18-38% min/monx. Material with impurities above 2% but not exceeding 5% for aluminium and copper may be accepted dependant on liquidity levels and reporter's discretion  MB-BMS-0016 Black mass, NCM, payable indicator, nickel, ddp China, % payable fastmarkets' inickel sulfate min 21%, max 22.5%; cobalt 10ppm max, exx China (location: Michael content of 15-25% nickel, 5-10% cobalt, 3-5% lithium, Minimum total cobalt and nickel content of 20%.  Quantity: Minimum total cobalt and nickel content of 20%.  Guantity: Minimum total cobalt and nickel c	Quality:	(low-end) Nickel and cobalt-rich black mass composed with metal content of 15-25% nickel, 3-13% cobalt, max 2%	Quality:	Nickel and cobalt-rich black mass composed with metal content of 15-25% nickel, 5-10% cobalt, 3-5% lithium. Minimum total cobalt and
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15-25% nickel, 5-10% cobalt, 3-5%   Unit: % payable of Fastmarkets' lithium carbonate 99.5% Li2CO3 min, battery grade, spot price range, exw domestic China, yuan per tonne Cash, Letter of credit weekly, Thursdays 6pm China time Publication: Weekly, Thursdays 6pm China time Publication: Weekly, Thursdays 6pm China time Publication: Weekly, Thursdays 6pm China time Payment terms: Publication: Weekly, Thursdays 6pm China time Payment terms: Cash, Letter of credit Publication: Weekly, Thursdays 6pm China time Payment terms: Publication: Cash, Letter of credit Publication: Weekly, Thursdays 6pm China time Payment terms: Cash, Letter of credit	Quality:	Nickel and cobalt-rich black mass		consumer
Ilithium. Minimum total cobalt and nickel content of 20%.   Quantity: min one truckload domestic China, yuan per tonne delivered duty paid Chinese consumer Publication: Publication: Weekly, Thursdays 6pm China time Timing: 45 days   Unit: % payable of Fastmarkets' nickel sulfate min 21%, max 22.5%; cobalt 10ppm max exw China, yuan per tonne Quality: Lithium iron phosphate (LFP) black mass containing 2-3% lithium.   Publication: Weekly, Thursdays 6pm China time   Quantity: min one truckload delivered duty paid Chinese consumer   Timing: 45 days   Unit: Chinese yuan per % of lithium contained   Cash, Letter of credit   Cash, Letter of credit   Cash, Letter of credit   Cash, Letter of credit   Cocation: Cash, Letter of credit   Cash, Letter of credit   Cocation: Cash, Letter of credit   Cocation: Cash, Letter of credit   Cash, Letter o		composed with metal content of	Timing:	45 days
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# Lithium-ion battery scrap

Copper scrap

CHINA

MB-LBS-0001 Lithium-ion battery scrap, NCM,

end of life, prismatic, exw China,

yuan per tonne

Quality: Prismatic end-of-life lithium-iron

battery scrap of nickel cobalt manganese (NCM) chemistry. Casing must be aluminium, not

steel.

Quantity: min one truckload Location: ex-works China

Timing: 45 days

Unit: Chinese yuan per tonne Payment terms: Cash, Letter of credit

Publication: Weekly, Thursdays 6pm China time

MB-LBS-0002 Lithium-ion battery scrap, LFP,

end of life, prismatic, exw China,

yuan per tonne

Quality: Prismatic end-of-life lithium-

iron battery scrap of lithium iron phosphate (LFP) chemistry. Casing must be aluminium, not steel.

Quantity: min one truckload Location: ex-works China

Timing: 45 days

Unit: Chinese yuan per tonne Payment terms: Cash, Letter of credit

Publication: Weekly, Thursdays 6pm China time

MB-CU-0512 No1 copper material, RCu-2A,1B

(candy/berry), cif China, LME/ Comex discount, US cents per lb

Quality: Definitions of RCu-2A and RCu-1B as

stipulated in China's GB per tonne 38471-2019 document. Both RCu-2A and RCu-1B require a metal recycling

rate of not less than 97%.

Quantity: Min 25 tonnes

Location: cif Chinese ports (Shanghai, Guangdong,

Zhejiang, Tianjin, 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

MB-CU-0360 No2 copper material, RCu-2B

(birch/cliff), cif China, LME/ Comex discount, US cents per lb

Quality: Minimum copper content 99% with

a min 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

**INDIA** 

MB-AL-0396

Quality:

Zorba, 95/5, CIF India, \$/tonne Shredded non-ferrous scrap made

up of a combination of aluminium, copper, lead, magnesium, stainless steel, nickel, tin, and zinc, in elemental or alloved (solid) form. 7orba assessed shall have a minimum of 95% metallic content and 5% copper and brass. Must be in large parcels of 30-125mm pieces. CIF Nhava Sheva and Mundra ports,

Location: India

US dollar/tonne Unit: Quantity: Minimum 30 tonnes

Payment: Cash

Publication: Weekly, Wednesdays at 4pm UK time

MB-AL-0397

Aluminium scrap, old sheet (Taint/Tabor), HRB, 3-5% attachments, CIF India, \$/tonne

Quality: Old sheet baled into HRB form, Shall

consist of clean old alloy aluminium sheet of two or more alloys, free of foil, venetian blinds, castings, hair wire, screen wire, food or beverage containers, radiator shells, airplane sheet, bottle caps, plastic, dirt, and other non-metallic items.

Attachments not to total more than

3-5%.

Location: CIF Nhava Sheva and Mundra ports,

India

US dollar/tonne Unit: Quantity: Minimum 30 tonnes

Payment:

Publication: Weekly, Wednesdays at 4pm UK time MB-AL-0398

Aluminium scrap, mixed aluminium castings (Tense), 3-5% attachments, CIF India, \$/tonne

Quality: Shall consist of all clean aluminium

castings which may contain auto and airplane castings but no ingots. Attachments not to total more than

Location: CIF Nhava Sheva and Mundra ports,

Unit: US dollar/tonne Quantity: Minimum 30 tonnes

Payment:

Publication: Weekly, Wednesdays at 4pm UK time

MB-AL-0399

Aluminium scrap, old sheet (Taint/Tabor), cut sheared, 5-8% attachments, CIF India, \$/tonne

Quality: Old sheet in cut sheared form. Pieces

shall be sheared in lenaths less than 1m. Shall consist of clean old alloy aluminium sheet of two or more alloys, free of foil, venetian blinds, castings, hair wire, screen wire, food or beverage containers, radiator shells, airplane sheet, bottle caps, plastic, dirt, and other non-metallic items. Attachments not to total

more than 5-8%.

Location: CIF Nhava Sheva and Mundra ports,

Unit: US dollar/tonne Minimum 30 tonnes Quantity:

Payment: Cash

Publication: Weekly, Wednesdays at 4pm UK time



MB-AL-0400 Aluminium scrap, cast wheels (Troma), CIF India, \$/tonne

Quality: Shall consist of clean, single-piece,

unplated aluminium small or medium-sized car wheels of a single specified alloy and free of tires. Attachments not to total more than 1%. Wheels must not include chrome and must not be truck or motorcycle

wheels.

Location: CIF Nhava Sheva and Mundra ports,

India

Unit: US dollar/tonne
Quantity: Minimum 15 tonnes

Payment: Cash

Publication: Weekly, Wednesdays at 4pm UK time

ISRI code: Troma

MB-AL-0401 Aluminium scrap, extrusions (Tata), 6063 cif India, \$/tonne

Quality: Shall consist of one alloy (typically

6063/HE9) of 95% clean, 5% impure material. Material may contain butt ends from the extrusion process but must be free of any foreign contamination. Anodized material is

acceptable.

Location: CIF Nhava Sheva and Mundra ports,

India

Unit: US dollar/tonne Quantity: Minimum 30 tonnes

Payment: Cash

Publication: Weekly, Wednesdays at 4pm UK time

ISRI code: Tata

Notes: Price is based on US-origin

95/5-grade extrusions material.

**SOUTHEAST ASIA** 

MB-AL-0409 Zorba, 98/2, CIF Southeast Asia,

\$/tonne

Quality: Shredded non-ferrous scrap made

up of a combination of aluminium, copper, lead, magnesium, stainless steel, nickel, tin, and zinc, in elemental or alloyed (solid) form. Zorba assessed shall have a minimum of 98% metallic content and 2% copper and brass. Must be in

large parcels of 30-125 mm pieces.

Quantity: Minimum 15 tonnes
Location: CIF Southeast Asia
Timing: Within eight weeks
Unit: US dollar/tonne

Payment: Cash

Publication: Weekly, Tuesdays at 4pm UK time Notes: Japan-origin material generally

Japan-origin material generally excluded due to wider variance in quality compared with US/Europe-

origin

MB-AL-0410 Aluminium scrap, 95/5 Extrusions

(Tata), CIF Southeast Asia,

\$/tonne

Quality: Shall consist of one alloy (typically

6063/HE9) of 95% clean, 5% impure material. Material may contain butt ends from the extrusion process but must be free of any foreign

contamination. Anodized material is

acceptable.

Quantity: Minimum 15 tonnes
Location: CIF Southeast Asia
Unit: US dollar/tonne
Timing: Within eight weeks

Payment: Cash

Publication: Weekly, Tuesdays at 4pm UK time Notes: Japan-origin material generally

excluded due to wider variance in quality compared with US/Europe-

origin



MB-AL-0412 Aluminium scrap, borings and turnings (Telic), CIF Southeast

Asia, \$/tonne

Quality: Shall consist of aluminium borings

and turnings that are clean,

unmixed, uncorroded and completely free of excessive oil and steel. Must not contain other alloys of aluminium and be free of grindings and babbitts. Must also be free of the following: thermo-break, saw chips, paper, cardboard and other foreign contamination; free of zinc corners, iron attachments, plastic, cardboard, foil, Venetian blinds, castings, hair wire, screen

bottle caps, dirt and other nonmetallic items. Typically, has 98-99%

wire, radiator shells, airplane sheet,

aluminium content. Minimum 15 tonnes Quantity: CIF Southeast Asia Location: Unit: US dollar/tonne Timing: Within eight weeks

Payment: Cash

Publication: Weekly, Tuesdays at 4pm UK time Notes: Japan-origin material generally excluded due to wider variance in

quality compared with US/Europe-ori

MB-AL-0411 Aluminium scrap, used beverage

Quality:

cans (Taldon), CIF Southeast Asia, \$/tonne

Shall have a minimum density of 14 pounds per cubic foot (225 kg/cubic meter), and a maximum density of 17 pounds per cubic foot (273 kg/ cubic meter) for unflattened used beverage cans (UBC) and 22 pounds per cubic foot (353 kg/cubic meter) for flattened UBC. Size: Minimum 30 cubic feet (0.85 cubic meter), with bale range dimensions of 24-40in (61-132 cm) by 30-52in (76-132 cm) by 40-84in(102-213 cm). The only acceptable tying method shall be as follows: four to six 5/8in (1.6 cm) x 0.020in (5 mm) steel bands, or six to 10 #13 gauge steel wires (aluminium bands or wires are acceptable in equivalent strength and number). Use of skids and/or support sheets of any material is not acceptable. Shall consist of old post-consumer aluminium UBC. Must be free of aluminium food cans, other scrap metals, foil, tin cans, plastic bottles, paper, glass and other non-metallic items. Must be magnetically separated and free of steel, plastic, glass, dirt and all other foreign substances. Any and all aluminium items other than UBC are unacceptable. Any free lead is a basis for rejection. Items not covered in the specification, including moisture and any variations to this specification should be agreed upon prior to shipment between the buyer and seller.

Quantity: Minimum 15 tonnes Location: CIF Southeast Asia Timing: Within eight weeks Unit: US dollar/tonne

Cash Payment:

Weekly, Tuesdays at 4pm UK time Publication: Notes: Japan-origin material generally

excluded due to wider variance in quality compared with US/Europe-

origin



UNITED KINGDOM		MB-AL-0010	Aluminium scrap commercial
MB-AL-0282	Aluminium scrap baled old rolled, LME discount, delivered consumer UK, £/tonne	Quality:	cast, delivered consumer UK, £/tonne Whole or broken aluminium castings of all kinds
Quality:	Wrought scrap of alloyed and unalloyed aluminium. Maximum 2% calcareous and other non-metallic substances	Quantity: Location: Timing: Unit:	Min 5 tonnes Delivered consumer works, UK Within 4 weeks GBP/tonne
Quantity: Location: Timing: Unit:	Min 5 tonnes Delivered consumer works, UK Within 4 weeks GBP/tonne	Payment terms: Publication:	Net monthly account Weekly. Wednesday 3-4pm London time
Payment terms: Publication:	Net monthly account Weekly. Wednesday 3-4pm London time	MB-AL-0011	Aluminium scrap commercial pure cuttings, delivered consumer UK, £/tonne
MB-AL-0007	Aluminium scrap cast wheels, delivered consumer UK, £/tonne	Quality:	New, uncoated, mixed alloys, pure sheet scrap. May contain proportion of one of more aluminium alloys,
Quality: Quantity: Location:	Cast aluminium wheels Min 5 tonnes Delivered consumer works, UK Within 4 weeks		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
Timing: Unit: Payment terms:	GBP/tonne Net monthly account	Quantity: Location:	Min 5 tonnes Delivered consumer works, UK
Publication:	Weekly. Wednesday 3-4pm London time	Timing: Unit: Payment terms: Publication:	Within 4 weeks GBP/tonne Net monthly account Weekly. Wednesday 3-4pm London
MB-AL-0009	Aluminium scrap clean HE9 extrusions, delivered consumer UK, £/tonne		time
Quality:	Clean HE9 extrusion scrap. Cu 0.1% max, Zn 0.1% max, free from deleterious materials, oil, grease,	MB-AL-0012	Aluminium scrap commercial turnings, delivered consumer UK, £/tonne
Quantity: Location: Timing: Unit:	non-metallic coatings max 1% Min 5 tonnes Delivered consumer works, UK Within 4 weeks GBP/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
Payment terms: Publication:	Net monthly account Weekly. Wednesday 3-4pm London time	Quantity: Location: Timing: Unit: Payment terms: Publication:	5 tonnes Delivered consumer works, UK Within 4 weeks GBP/tonne Net monthly account Weekly. Wednesday 3-4pm London



MB-AL-0015	Aluminium scrap group 7 turnings, delivered consumer UK, £/tonne	EUROPE	
Quality:	Clean, uncorroded aluminium borings, millings and turnings of two or more specified alloys. Zn 7.5% max, Fe fines 3% max, oil/moisture/	MB-AL-0404	Aluminium scrap, clean production extrusions (6063), differential to LME, delivered consumer Europe, €/tonne
Quantity: Location: Timing: Unit: Payment terms:	free iron 10% max Min 5 tonnes Delivered consumer works, UK Within 4 weeks GBP/Tonne Net monthly account	Quality:  Quantity:	Shall consist of one alloy (6063/HE9) and may contain butt ends from the extrusion process but must be free of any foreign contamination. Anodized material is acceptable.  Min 25 tonnes
Publication:	Weekly. Wednesday 3-4pm London time	Location: Timing: Unit: Payments terms:	Delivered consumer works, Europe Within 4 weeks Euro per tonne 30 days, other payment terms
MB-AL-0014	Aluminium scrap group 1 pure 99% & litho, delivered consumer UK, £/tonne	Publication: Notes:	normalized Weekly, Friday, 4pm London time ISRI code – Tata. Typical market
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%)		practice is that the final price is derived by applying the differential to a future, unknown LME value, usually on a date within the month of delivery, buyer's choice, and
Quantity: Location: Timing: Unit:	5 tonnes Delivered consumer works, UK Within 4 weeks GBP/tonne		whichever is lower between the cash and three-month price.
Payment terms: Publication:	Net monthly account Weekly. Wednesday 3-4pm London time	MB-AL-0405	Aluminium scrap, post- consumer 95/5 extrusions (6063), differential to LME, delivered consumer Europe, €/tonne
MB-AL-0018	Aluminium scrap loose old rolled cuttings, delivered consumer UK, £/tonne	Quality:	Shall consist of one alloy (6063/ HE9) comprising minimum 95% of the total volume, with maximum 5% impurities. Anodized material is
Quality:	Wrought scrap of alloyed and unalloyed aluminium. Maximum 2% calcarious and other non-metallic substances	Quantity: Location: Timing:	acceptable. Min 25 tonnes Delivered consumer works, Europe Within 4 weeks
Quantity: Location: Timing: Unit:	Min 5 tonnes Delivered consumer works, UK Within 4 weeks GBP/tonne	Unit: Payments terms: Publication:	Euro per tonne 30 days, other payment terms normalized Weekly, Friday, 4pm London time
Payment terms: Publication:	Net monthly account Weekly. Wednesday 3-4pm London time	Notes:	ISRI code – Tata. Typical market practice is that the final price is derived by applying the differential to a future, unknown LME value, usually from a date within the month of delivery, buyer's choice, and whichever is lower between the official cash and official three-

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month price.



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. Nonmetallics 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, €/

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** 

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

Notes: Full methodology available here

MB-AL-0387 Aluminium pressure diecasting

ingot DIN230, delivered Europe,

€ per tonne

Quality: Ingot, Cu 0.08% max, Si 10.5-13.5%,

Fe 0.45-0.9%, Mn 0.55% max, Zn

0.15% 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 per tonne

Payment terms: 30 days, other payment terms

normalized

Publication: Weekly, Friday 3-4pm London time.



MB-AL-0388 Aluminium pressure diecasting ingot DIN239, delivered Europe,

€ per tonne

Quality: Ingot, Cu 0.08% max, Si 9.00-11.00%,

Fe 0.45-0.9%, Mn 0.55% max, Mg

0.25-0.50%, Zn 0.15% max

Quantity: Min 25 tonnes

Delivered consumer works in Europe, Location:

most consumers in Northern Europe,

in particular Germany

Timing: Within 2 months Unit: EUR per 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

Ingot. Cu 3-4%, Mg 0.1% max, Si 7.5-Quality:

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

Within 2 months Timing: 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

Min 5 tonnes Quantity:

Delivered consumer works, UK Location:

Within 2 months Timing: GBP/tonne Unit:

Payment terms: Net monthly account

Publication: Weekly. Wednesday 3-4pm London

time

**JAPAN** 

MB-AL-0292 Aluminium ingot ADC12 spot

(MJP), cfr Japan, \$ per tonne

Quality: Secondary aluminium alloy ingot: Cu:

> 1.5-3.5%, Si: 9.6-12%, Mg: 0.3% Max, Zn: 1.0% Max, Fe: 0.9% Max, Mn: 0.5% Max, Ni: 0.5% Max, Ti: 0.3% Max, Pb: 0.2% Max, Sn: 0.2% Max

min 20 tonnes Quantity:

Location: CFR Main Japanese ports at

Yokohama, Nagoya, Osaka, Tokyo

and Kobe

Unit: USD/tonne

Payment terms: Cash against documents within 7 days

Publication: Weekly. Wednesday 3-4pm London

time

CHINA

MB-AL-0350 Aluminium ingot ADC12 ex-works

China, duty-paid, yuan/tonne

Quality: Secondary aluminium alloy ingot: Cu:

> 1.5-3.5%, Si: 9.6-12%, Mg: 0.3% Max, Zn: 1.0% Max, Fe: 0.9% Max, Mn: 0.5% Max, Ni: 0.5% Max, Ti: 0.3% Max, Pb: 0.2% Max, Sn: 0.2% Max,

Quantity: min 20 tonnes

Location: Ex-works China, duty-paid price in

both south and north of China

Unit: RMB/tonne

Payment terms: Cash against documents within 7 days Publication:

Weekly. Wednesday 3-4pm London

time



## Titanium scrap

#### **EUROPE**

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 3pm 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 3pm London

time



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