

CRU Prices

Bulk Ferroalloys

Chrome

Molybdenum

Noble Alloys and

Minor Metals

Methodology and

Definitions Guide

August 2025



**Data, Insight,
Strategy &
Communities**

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Methodology and Definitions Guide

1 Scope

This guide covers commodity prices in all geographical markets and should be read in conjunction with the [CRU Group Compliance Framework and Methodology Guide](#). It details a commodity-specific methodology which has precedence, with all other aspects covered by the Group methodology guide.

2 Methodology

CRU assesses prices for physically traded bulk ferroalloys, chrome, molybdenum and noble alloys & minor metals in the global market that are outlined in the following methodology guide. This methodology, was developed in consultation with the industry (including through our annual Underlying Market Conditions Review), allowing CRU to capture market liquidity and establish prices that are reliable and representative of the market. Specification definitions such as price assessment frequency, incoterms, currencies, size/volumes, units and others are aligned with the relevant market requirements and industry conventions.

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

Final published prices are assessed as either as a point or a range because where this has been established as an industry requirement. Prices that are defined as a point tend to be monthly prices where a single point defines reference as a basis for negotiations and for use in long-term contracts. Prices that are determined as a range tend to be more widely distributed, and a range is therefore better suited to reflect the spread of data. These prices are often displayed as a point monthly average for use in long term contracts.

Data Providers

CRU price assessments are based on regular contact with a wide a network of market participants situated at critical nodes in the supply chain. This network is constantly reviewed to seek a balance of buyers and sellers that are representative of the market.

They must have access to data relating to actual spot market transactions (a purchase or a sale), bid/offer information or be able to provide a credible opinion on such prices in the absence of any other data over the relevant time period. They are therefore typically employed in sales or marketing functions on the sell side and purchasing functions on the buy side, or act in a trading function. Data Providers may also include individuals in finance functions if they can provide the same.

Each data provider is required to meet the criteria stipulated in Section 2.4 of the *CRU Group Compliance Framework and Methodology Guide*.

Data Submitted and Submission Processes

Data providers are to provide CRU with prices relating to sales or purchases concluded in a transaction window as follows:

Bi-weekly Prices

- Data to be provided between 16:00 Tuesday and 16:00 Thursday in the appropriate regional time zone, or other price information relating to this time period.
- Data to be provided between 16:00 Thursday and 16:00 Tuesday in the appropriate regional time zone, or other price information relating to this time period.

Weekly Prices

- Data to be provided between 13:30 Friday (7 days) prior to publication and 13:30 Friday in the appropriate regional time zone on the day of publication, or other price information relating to this time period.

Monthly Prices

- Data to be provided between 16:00 the month prior to publication and 16:00 in the appropriate regional time zone on the day of publication, or other price information relating to this time period. However, data will usually be collected in a period nearer to the day of publication to ensure accuracy and timeliness of the final assessment.

*These times may be subject to change, any changes will be notified in advance.

All prices are based exclusively on transaction data (actual deals concluded) and to that extent there is no hierarchy of acceptable price types. Information relating to bids/offers or an opinion of the prevailing market price will strictly not be used in the final price assessment calculation.

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

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

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

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

Data Submission Dependency and Minimum Threshold

CRU seeks to receive market data information from a broad range of active data sources as possible and seeks to increase the number of companies willing to submit market data. In the event that a limited number of market participants are active in the market, and the market data received constitutes a significant proportion of the total data on which the assessment is based, CRU will use expert judgement to determine whether to exclude, or include or defer the indication received until more information is received. This would be based on: observation of the previous price; short term historical price trends; other quantitative market data including prices in other related active markets, producer price change announcements; qualitative information such as that received from interactions with market participants or other CRU Price Assessors, and; other sources of information relevant to the market.

CRU does not outline minimum transaction data thresholds to determine bulk ferroalloys, chrome, molybdenum and noble alloys & minor metals price assessments to avoid establishing non-representative assessments that may be deemed unrepeatable. Periods of liquidity differs across these markets and data thresholds could result in price assessments that do not accurately reflect the market. Price assessors, instead, aim to source data from a wide range of industry participants to establish that price assessments, are in line with the individual price's market data specifications, such as size, timing, loading locations etc, outlined in this methodology.

When no transaction data is received, price assessors follow the processes set out in this document that reflect the processes in the "Price determination in an illiquid market" section and expert judgement would be used to determine the final price value. Further details can be found under Section 2.1 of the *CRU Group Compliance Framework and Methodology Guide*.

Final Price Assessment

Process

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

1. All data points submitted are assessed against admissibility criteria in the relevant product specification and the criteria stated in this methodology.
 - a. Data points which meet the criteria without normalisation are determined as admissible
Data points that require normalisation and can be normalised are normalised, and the resulting data determined as admissible.
 - b. All other data points are rejected as inadmissible and will not be used in subsequent price evaluation.
 - c. Of the data points that remain, outliers (defined below) may also be rejected as inadmissible if they otherwise do not meet acceptability criteria, for example are not established as repeatable business.
2. The mid-point of remaining admissible data points is typically calculated as the volume-weighted average. In the unlikely event that a price is provided without associated volume, the average volume associated with all other trades with volumes will be used as the weighting for that price. If no prices have associated volumes, a straight average calculation will be used.

3. Expert judgement is used to establish the high and low values of the published price range by reference to the distribution of admissible data points around the mid-point and values of the lowest and highest data admissible points, in the current and prior assessment periods. Metrics such as the standard deviation may be used as a guide to this process, but not as a sole determinant of the range. This means the high and low of the published range are not necessarily set equal to the highest and lowest admissible data points because to do so would:
 - a. Introduce excessive volatility in the high and low of the published range over time.
 - b. Define the range by individual deals which may carry little volume weight and ignore other admissible data points.

Normalisation

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

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

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

Expert judgment and exclusion of outliers

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

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

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

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

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

Consistency in the application of expert judgement is achieved through a combination of selection, formal and informal training and review, supervisions and control processes as detailed in section 4.5 of the *CRU Group Compliance Framework and Methodology Guide*.

Price determination in an illiquid market

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

Silicon metal

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

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

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

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

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

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

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

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

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

CRU EU Chrome Reference Value

CRU's EU Chrome Reference Value is a monthly calculation that represents an average value of alternatives to charge chrome in the European market. The final value is derived from the average of the EU HC FeCr 54- 60% Cr DDP and EU HC 60-64.9% Cr DDP midpoints from the same month, adding the variations between the two indexes in the two months preceding the Reference announcement. Once the value has been calculated, an additional factor (+/- \$1 c/lb) is added or subtracted by a Price Assessor to signal price direction for the following month. CRU's EU Chrome Reference Value does not indicate a gross or net price for charge chrome in Europe. Rather it is meant to provide a realistic average price for alternatives to the European benchmark price. No approximations will be made in the calculations until the finalised number. The resulting reference is approximated to the closest integer.

Price Verification

Information from data providers and the final price assessments are captured and established in the CRU's Prices System (CPS). The final prices are approved by another price assessor or the editor.

Final Benchmark Publication

CRU bulk ferroalloys, chrome, molybdenum, nickel, noble alloys & minor metals prices are published in the *CRU Bulk Ferroalloys Service*, *Chrome Service*, *Molybdenum Service* and *Noble Alloys & Minor Metals Service*, via CRU Online; data feeds including APIs; and DataLab (CRU's data delivery platform).

Bi-weekly (twice-weekly) prices are first published on CRU Online on Tuesday and Thursday.

Weekly prices are first published on CRU Online on Friday.

Monthly prices are first published on CRU Online on the first weekday of the month.

3 Definitions

Bulk Ferroalloys

Ferromanganese

US HC 76% Mn EXW

DataLab Name:

Grade:

Price basis:

Credit/Payment terms:

Packaging:

Loading Location:

Currency:

Weight Unit:

Size:

Timing:

Main Consumer Markets:

Pricing:

Duties/Tariffs:

Frequency:

Ferromanganese, High Carbon, 76% Mn, Spot price; USA, ex-warehouse

76% Mn, 7% C, 1.5% Si, Max 0.25% P, 0.3% S

US ex-warehouse, per long ton of material

Cash/Net 30-60 standard

Bulk

US warehouse, typically Pittsburgh or Chicago, producer plant Type:

Spot

US dollar in cents

Long ton

Multiple truckloads

No more than 16 weeks forward

US inland terminals/locations

Business reported by sellers to buyers, including producers to traders

Duty paid

Bi-weekly, every Tuesday and Thursday

EU HC 76% Mn DDP

DataLab Name:

Grade:

Price basis:

Credit/Payment terms:

Packaging:

Loading Location:

Type:

Currency:

Weight Unit:

Size:

Timing:

Consumer Markets:

Pricing:

Duties/Tariffs:

Frequency:

Ferromanganese, High Carbon, 76% Mn, Spot price; Europe, DDP

76% Mn, 7% C, 1.5% Si, Max 0.25% P, 0.3% S

Delivered, duty paid, per Tonne of material

Cash/Net 30-60 standard

Bulk

Rotterdam warehouse or producing plant, additional locations

Spot

Euro

Tonne

Multiple truckloads

No more than 12 weeks forward Main

European inland terminals/locations

Business reported by sellers to buyers, including producers to traders

Duty paid

Bi-weekly, every Tuesday and Thursday

China HC 75% Mn DAP

DataLab Name:

Grade:

Price basis:

Credit/Payment terms:

Loading Location:

Type:

Currency:

Weight Unit:

Size:

Timing:

Main Consumer Markets:

Pricing:

Duties/Tariffs:

Frequency:

Ferromanganese, High Carbon, 75% Mn, Spot price; China, DAP

75% Mn

Per mt, delivered steel mill, mainly Hebei

n/a

Producing plant

Spot

RMB

Tonne

100 t +

n/a

Northern China

Business reported by sellers to buyers, including producers to traders

VAT included, any other duties excluded

Bi-weekly, every Tuesday and Thursday

India HC 76% Mn FOB

DataLab Name:

Grade:

Price basis:

Credit/Payment terms:

Packaging:

Ferromanganese, High Carbon, 76% Mn, Spot price; India, FOB

76% Mn, 7% C, 1.5% Si, Max 0.25% P, 0.3% S

FOB India, per Tonne of material

Cash/Net 30-60 standard

Bulk

| | |
|------------------------|--|
| Loading Location: | Producing plant, additional locations |
| Type: | Spot |
| Currency: | Dollar |
| Weight Unit: | Tonne |
| Size: | Multiple truckloads |
| Timing: | No more than 12 weeks forward |
| Main Consumer Markets: | Europe, Middle East, South East Asia |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | Duty paid |
| Frequency: | Bi-weekly, every Tuesday and Thursday |

India HC 70% Mn EXW

DataLab Name:

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

China HC 75% Mn FOB

DataLab Name:

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

Japan HC 76% CIF

DataLab Name:

| | |
|------------------------|---|
| Grade: | Ferromanganese, High Carbon, 76% Mn, Spot price; Japan, CIF |
| Price basis: | 76% Mn |
| Credit/Payment terms: | CIF Japan |
| Loading Location: | Line of credit/Wire transfer |
| Type: | Producer main port |
| Currency: | Spot |
| Weight Unit: | USD |
| Size: | Tonne |
| Timing: | Bulk, typically 25 mt container |
| Main Consumer Markets: | No more than 12 weeks forward |
| Pricing: | Japan |
| Duties/Tariffs: | Business reported by sellers to buyers, including producers to traders |
| Frequency: | Export duty paid |
| | Monthly, first weekday of month |

China HC 65% Mn DAP

DataLab Name:

Grade:
Price basis:
Credit/Payment terms:
Loading Location:
Type:
Currency:
Weight Unit:
Size:
Timing:
Main Consumer Markets:
Pricing:
Duties/Tariffs:
Frequency:

Ferromanganese, High Carbon, 65% Mn, Spot price; China, DAP

65% Mn
Per mt, delivered steel mill, mainly Hebei
n/a
Producing plant
Spot
RMB
Tonne
100+ t
n/a
Northern China
Business reported by sellers to buyers – no inter-trade activity
VAT included, any other duties excluded
Bi-weekly, every Tuesday and Thursday

US MC 80% Mn EXW

DataLab Name:

Grade:
Price basis:
Credit/Payment terms:
Packaging:
Loading Location:

Currency:
Weight Unit:
Size:
Timing:
Main Consumer Markets:
Pricing:
Duties/Tariffs:
Frequency:

Ferromanganese, Medium Carbon, 80% Mn, Spot price; USA, ex-warehouse

80% Mn, 1.5% C, Max 0.3% P, 0.2% S, 1% Si
US ex-warehouse, per pound Mn
Cash/Net 30-60 standard
Bulk
US warehouse, typically Pittsburgh or Chicago, producer plant Type:
Spot
US dollar in cents
Pounds
Multiple truckloads
No more than 16 weeks forward
US inland terminals/locations
Business reported by sellers to buyers, including producers to traders
Duty paid
Bi-weekly, every Tuesday and Thursday

EU MC 81% Mn DDP

DataLab Name:

Grade:
Price basis:
Credit/Payment terms:
Packaging:
Loading Location:
Type:
Currency:
Weight Unit:
Size:
Timing:
Consumer Markets:
Pricing:
Duties/Tariffs:
Frequency:

Ferromanganese, Medium Carbon, 81% Mn, Spot price; Europe, DDP

81% Mn, 1.5% C, Max 0.3% P, 0.2% S, 1% Si
Delivered, duty paid, per pound of material
Cash/Net 30-60 standard
Bulk
Rotterdam warehouse or producing plant, additional locations
Spot
Euros
Tonne
Multiple truckloads
No more than 12 weeks forward Main
European inland terminals/locations
Business reported by sellers to buyers, including producers to traders
Duty paid
Bi-weekly, every Tuesday and Thursday

China MC 75% Mn DAP

DataLab Name:

Grade:
Price basis:
Credit/Payment terms:
Loading Location:
Type:
Currency:
Weight Unit:
Size:
Timing:
Main Consumer Markets:
Pricing:
Duties/Tariffs:

Ferromanganese, Medium Carbon, 75% Mn, Spot price; China, DAP

75% Mn, 2% max C
Per mt, delivered steel mill, mainly Hebei
n/a
Producer plant
Spot
RMB
Tonne
100t +
n/a
Northern China
Business reported by sellers to buyers – no inter-trade
VAT included, any other duties excluded

Frequency: Bi-weekly, every Tuesday and Thursday

China MC 75% Mn FOB

DataLab Name:

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

US LC 80-85% Mn EXW

DataLab Name:

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

Ferrosilicon

US 75% Si EXW

DataLab Name:

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

EU 75% Si DDP

DataLab Name:

Grade: Ferrosilicon, 75% Si, Spot price; Europe, DDP
 75% Si, Max 1.5% Al, 0.10% C, 0.04% P, 0.01% S (Standard 10-50mm)
 Price basis: DDP, per mt of material (not Si)
 Credit/Payment terms: Cash/Net 30-60 standard
 Packaging: Bulk
 Loading Location: Rotterdam warehouse or producing plant, additional locations
 Type: Spot
 Currency: Euro

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

China 75% Si FOB

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

China 75% Si DAP

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

China 72% Si FOB

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

China 72% Si DAP

| | |
|-----------------------|--|
| DataLab Name: | Ferrosilicon, 72% Si, Spot price; China, DAP |
| Grade: | 72-74% Si |
| Price basis: | Per mt, delivered steel mill, mainly Hebei |
| Credit/Payment terms: | n/a |
| Loading Location: | Producing plant |
| Type: | Spot |
| Currency: | RMB |

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

Japan 75% Si CIF

DataLab Name:

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

Ferrosilicon, 75% Si, Spot price; Japan, CIF

Silicomanganese

US 65% Mn EXW

DataLab Name:

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

Silicomanganese, 65% Mn, Spot price; USA, ex-warehouse

EU 65%Mn DDP

DataLab Name:

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

Silicomanganese, 65% Mn, Spot price; Europe, DDP

China 65% Mn DAP

DataLab Name:

| | |
|--------------|--|
| Grade: | 65% Mn, 16% Si |
| Price basis: | Per mt, delivered steel mill, mainly Hebei |

Silicomanganese, 65% Mn, Spot price; China, DAP

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

India 65%Mn FOB

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

India 60%Mn FOB

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

India 60% Mn EXW

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

China 65% Mn FOB

DataLab Name:

| | |
|------------------------|---|
| Grade: | Silicomanganese, 65% Mn, Spot price; China, FOB Mn 65%; Si 17% |
| Price basis: | FOB China ports (mostly Tianjin and Fangcheng) |
| Credit/Payment terms: | Line of credit/Wire transfer |
| Loading Location: | Chinese ports - foreign destination ports |
| Type: | Spot |
| Currency: | US dollar |
| Weight Unit: | Tonne |
| Size: | Bulk, typically 25 mt container |
| Timing: | 4-8 weeks |
| Main Consumer Markets: | Japan, Africa and Asia |
| Pricing: | Calculated |
| Duties/Tariffs: | Export duty paid |
| Frequency: | Bi-weekly, every Tuesday and Thursday |

Japan 65% Mn CIF

DataLab Name:

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

Japan 65% Mn CIF (IN orig.)

DataLab Name:

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

Silicon Metal

US 98.5% Si 5-5-3 EXW

DataLab Name:

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

Duties/Tariffs:
Frequency:

Duty paid
Bi-weekly, every Tuesday and Thursday

EU 98.5% Si 5-5-3 DDP

DataLab Name:

Silicon Metal, 98.5% Si 5-5-3, Spot price; Europe, DDP

Grade:
Price basis:
Credit/Payment terms:
Packaging:
Loading Location:
Type:
Currency:
Weight Unit:
Size:
Timing:
Consumer Markets:
Pricing:
Duties/Tariffs:
Frequency:

98.5% Si, Max 0.5% Fe, 0.5% Al, 0.3% Ca
Delivered, duty paid, per Tonne
Cash/Net 30-60 standard
Bulk
Rotterdam or producing plant
Spot
Euros
Tonne
Multiple truckloads
No more than 12 weeks forward Main
European inland terminals/locations
Business reported by sellers to buyers, including producers to traders
Not applicable
Bi-weekly, every Tuesday and Thursday

China 98.5% Si 5-5-3 FOB

DataLab Name:

Silicon Metal, 98.5% Si 5-5-3, Spot price; China, FOB

Grade:
Price basis:
Credit/Payment terms:
Loading Location:
Type:
Currency:
Weight Unit:
Size:
Timing:
Main Consumer Markets:
Pricing:
Duties/Tariffs:
Frequency:

Si 98.5% min; Max 0.5% Fe, 0.5% Al, 0.3% Ca
FOB Guangzhou Huangpu port, China
Line of credit/Wire Transfer
Chinese ports - foreign destination ports
Spot
US dollar
Tonne
Bulk, typically 25 mt container
4-8 week delivery
Japan, South Korea, Southeast Asia, India and Europe
Business reported by sellers to buyers, including producers to traders
No export duty
Bi-weekly, every Tuesday and Thursday

China 98.5% Si 5-5-3 DAP

DataLab Name:

Silicon Metal, 98.5% Si 5-5-3, Spot price; China, DAP

Grade:
Price basis:
Credit/Payment terms:
Loading Location:
Type:
Currency:
Weight Unit:
Size:
Timing:
Main Consumer Markets:
Pricing:
Duties/Tariffs:
Frequency:

Si 98.5% min; Max 0.5% Fe, 0.5% Al, 0.3% Ca
Delivered consumer
Cash/Bank acceptance bill
Producing plant
Spot
RMB
Tonne
Multiple truckloads
No more than 12 weeks forward
China inland
Business reported by sellers to buyers, including producers to traders
VAT included, any other duties excluded
Bi-weekly, every Tuesday and Thursday

Japan 98.5% Si 5-5-3 CIF

DataLab Name:

Silicon Metal, 98.5% Si 5-5-3, Spot price; Japan, DAP

Grade:
Price basis:
Credit/Payment terms:
Loading Location:
Type:
Currency:
Weight Unit:
Size:
Timing:
Main Consumer Markets:

Si 98.5% min; Max 0.5% Fe, 0.5% Al, 0.3% Ca
CIF Japan
Line of credit/Wire transfer
Country of origin, mostly China
Spot
USD
Tonne
Multiple containers
No more than 12 weeks forward
Japanese terminals/locations

| | |
|-----------------|--|
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | Duties paid |
| Frequency: | Monthly, first weekday of month |

EU 99% Si 4-4-1 DDP

| | |
|-----------------------|--|
| DataLab Name: | Silicon Metal, 99% Si 4-4-1, Spot price; Europe, DDP |
| Grade: | 99% Si, Max 0.4% Fe, 0.4% Al, 0.1% Ca |
| Price basis: | Delivered, duty paid, per Tonne |
| Credit/Payment terms: | Cash/Net 30-60 standard |
| Packaging: | Bulk |
| Loading Location: | Rotterdam, producing plant |
| Type: | Spot |
| Currency: | Euro |
| Weight Unit: | Tonne |
| Size: | Multiple truckloads |
| Timing: | No more than 12 weeks forward Main |
| Consumer Markets: | European inland terminals/locations |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | Not applicable |
| Frequency: | Bi-weekly, every Tuesday and Thursday |

China 99% Si 4-4-1 FOB

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

China 99% Si 4-4-1 DAP

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

Manganese Ore

China Lump 36-38% Mn CIF

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

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

China Lump 44% Mn CIF

DataLab Name: [Manganese Ore, Lump, 44% Mn, Spot price; China, CIF](#)

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

China Lump 36-38% Mn FOT Tianjin

DataLab Name: [Manganese Ore, Lump, 36-38% Mn, Spot price; China, Tianjin, FOT](#)

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

China Lump 44% Mn FOT Tianjin

DataLab Name: [Manganese Ore, Lump, 44% Mn, Spot price; China, Tianjin, FOT](#)

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

Manganese Metal

China EMM Flake 99.7% Mn FOB

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

China EMM Flake 99.7% Mn EXW (dom.)

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

US EMM 99.7% Mn EXW

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

EU EMM 99.7% Mn DDP

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

| | |
|-----------------|--|
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | Duty paid |
| Frequency: | Bi-weekly, every Tuesday and Thursday |

Manganese Sulfate

China Manganese sulfate 32% Mn min, EXW

DataLab Name: China Manganese sulfate 32% Mn min, EXW

| | |
|------------------------|---|
| Grade: | 32% Mn min, Fe 0.001% max, Zn 0.001% max, Cu 0.001% max, Pb 0.001% max, Cd 0.0005% max, K 0.01% max, Na 0.01% max, Ca 0.01% max, Mg 0.01% max, Ni 0.005% max, Co 0.005% max |
| Price basis: | China ex-works |
| Credit/Payment terms: | Bank acceptance bill/Cash |
| Loading Location: | Producing plant |
| Type: | Spot |
| Currency: | RMB |
| Weight Unit: | Tonne |
| Size: | 33t + |
| Timing: | n/a |
| Main Consumer Markets: | China mainland |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | VAT included, any other duties excluded |
| Frequency: | Monthly, first weekday of month |

Chrome

Ferrochrome

EU Chrome Reference Value

| | |
|---------------|---|
| DataLab Name: | CRU Reference Price Index, Chrome, Market- Europe |
| Price Basis: | Derived from the following this calculation process |
| Frequency: | Monthly, first weekday of month |

China HC 48-63% Cr CIF

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

China HC 49-53% Cr EXW

| | |
|------------------------|--|
| DataLab Name: | Chrome, High Carbon, 49-53% Cr, Spot price; China, EXW |
| Grade: | 49-53% Cr; 6-10% C |
| Price basis: | China ex-producing point/warehouse |
| Credit/Payment terms: | Cash |
| Loading Location: | Producing plant/warehouse |
| Type: | Spot |
| Currency: | RMB |
| Weight Unit: | Tonnes |
| Size: | 500 t + |
| Timing: | n/a |
| Main Consumer Markets: | China inland terminals/locations |
| Pricing: | Business reported by sellers to buyers, including producers to traders |

Duties/Tariffs: VAT included, any other duties excluded
Frequency: Bi-weekly, every Tuesday and Thursday

EU HC 54-60% Cr DDP

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

US HC 62-70% Cr EXW

DataLab Name: Chrome, High Carbon, 62-70% Cr, Spot price; USA, ex-warehouse
Grade: 62-70% Cr; 6-8% C; 1.5% max Si
Price basis: US Ex-warehouse, contained Cr
Credit/Payment terms: Cash/Net 30-60 standard
Packaging: Bulk
Loading Location: US warehouse, typically Pittsburgh or Chicago
Type: Spot
Currency: US dollar in cents
Weight Unit: Pounds
Size: Multiple truckloads
Timing: No more than 12 weeks forward
Main Consumer Markets: US inland terminals/locations
Pricing: Business reported by sellers to buyers, including producers to traders
Duties/Tariffs: Duty paid
Frequency: Bi-weekly, every Tuesday and Thursday

EU HC 65-70% Cr DDP

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

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

EU HC 60-64.9% Cr DDP

DataLab Name: Chrome, High Carbon, 60-64.9% Cr, Spot price; Europe, DDP
Grade: 60-64.9% Cr; 6-9% C; 3% max Si
Price basis: Delivered, Duty paid, contained Cr
Credit/Payment terms: Cash/Net 30-60 standard
Packaging: Bulk
Loading Location: Rotterdam warehouse or producing plant, additional locations
Type: Spot
Currency: US dollar in cents

| | |
|-------------------|--|
| Weight Unit: | Pounds |
| Size: | Multiple truckloads |
| Timing: | No more than 12 weeks forward Main |
| Consumer Markets: | European inland terminals/locations |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | Duty paid |
| Frequency: | Bi-weekly, every Tuesday and Thursday |

US LC 0.05% C EXW

DataLab Name:

| | |
|------------------------|--|
| Grade: | Chrome, Low Carbon, 0.05% C, Spot price; USA, ex-warehouse |
| Price basis: | 65-70% Cr; 0.05 C |
| Credit/Payment terms: | US Ex-warehouse, contained Cr |
| Packaging: | Cash/Net 30-60 standard |
| Loading Location: | Bulk |
| Type: | US warehouse, typically Pittsburgh or Chicago |
| Currency: | Spot |
| Weight Unit: | US dollar in cents |
| Size: | Pounds |
| Timing: | Minimum 10 mt |
| Main Consumer Markets: | No more than 12 weeks forward |
| Pricing: | US inland terminals/locations |
| Duties/Tariffs: | Business reported by sellers to buyers, including producers to traders |
| Frequency: | Duty paid |
| | Bi-weekly, every Tuesday and Thursday |

EU LC 0.05% C DDP

DataLab Name:

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

US LC 0.10% C EXW

DataLab Name:

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

EU LC 0.10% C DDP

DataLab Name:

| | |
|-----------------------|--|
| Grade: | Chrome, Low Carbon, 0.10% C, Spot price; Europe, DDP |
| Price basis: | 65-70% Cr; 0.10 C |
| Credit/Payment terms: | Delivered, duty paid, contained Cr |
| | Cash/Net 30-60 standard |

| | |
|-------------------|--|
| Packaging: | Bulk |
| Loading Location: | Rotterdam warehouse or producing plant, additional locations |
| Type: | Spot |
| Currency: | US dollar in cents |
| Weight Unit: | Pounds |
| Size: | Multiple truckloads |
| Timing: | No more than 12 weeks forward Main |
| Consumer Markets: | European inland terminals/locations |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | Duty paid |
| Frequency: | Bi-weekly, every Tuesday and Thursday |

US LC 0.15% C EXW

| | |
|------------------------|--|
| DataLab Name: | Chrome, Low Carbon, 0.15% C, Spot price; USA, ex-warehouse |
| Grade: | 65-70% Cr; 0.15 C |
| Price basis: | US ex-warehouse, contained Cr |
| Credit/Payment terms: | Cash/Net 30-60 standard |
| Packaging: | Bulk |
| Loading Location: | US warehouse, typically Pittsburgh or Chicago |
| Type: | Spot |
| Currency: | US dollar in cents |
| Weight Unit: | Pounds |
| Size: | Single truckload |
| Timing: | No more than 12 weeks forward |
| Main Consumer Markets: | US inland terminals/locations |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | Duty paid |
| Frequency: | Bi-weekly, every Tuesday and Thursday |

Japan LC 0.1% CIF

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

Chrome Ore

China Lump 42% Cr CIF (TR orig.)

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

Frequency: Bi-weekly, every Tuesday and Thursday

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

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

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

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

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

DataLab Name: Chrome, Concentrates, 44% Cr, Spot price; China, South Africa origin, CIF
Grade: 44% Cr
Price basis: CIF Chinese main port
Credit/Payment terms: Cash/Net 30-60 standard
Packaging: Bulk, container
Loading Location: Main South African port
Type: Spot
Currency: US dollar
Weight Unit: Dry Tonne
Size: Multiple containers or larger
Timing: No more than 12 weeks forward
Main Consumer Markets: China inland terminals/locations
Pricing: Business reported by sellers to buyers, including producers to traders
Duties/Tariffs: Duty paid
Frequency: Bi-weekly, every Tuesday and Thursday

China UG2 42% Cr CIF (ZA orig.)

DataLab Name: Chrome, UG2 Concentrates, 42% Cr, Spot price; China, South Africa origin, CIF
Grade: 42% Cr
Price basis: CIF main Chinese port
Credit/Payment terms: Cash/Net 30-60 standard
Packaging: Bulk, container
Loading Location: Main South African port
Type: Spot
Currency: US dollar
Weight Unit: Tonne
Size: Multiple containers or larger

| | |
|------------------------|--|
| Timing: | No more than 12 weeks forward |
| Main Consumer Markets: | China inland terminals/locations |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | No |
| Frequency: | Bi-weekly, every Tuesday and Thursday |

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

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

Chrome Metal

US Aluminothermic 99% Cr EXW

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

EU Aluminothermic 99% Cr DDP

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

Molybdenum

Ferromolybdenum

US FeMo 65% Mo EXW

DataLab Name:

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

EU FeMo 65% Mo DDP

DataLab Name:

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

China FeMo 60% Mo DAP

DataLab Name:

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

Molybdenum Oxide

US Oxide 57% Mo EXW

DataLab Name:

| | |
|-----------------------|---|
| Grade: | Molybdenum, Oxide, Spot price; USA, EXW |
| Price basis: | 57% min Mo – 0.5% Cu, 0.1% P, lead and sulfur |
| Credit/Payment terms: | US ex-warehouse |
| Loading Location: | Cash/Net 30 |
| Type: | Major US ports/warehouse |
| Currency: | Spot |
| | US dollar |

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

EU Oxide 57% Mo EXW

DataLab Name:

| | |
|-----------------------|--|
| Grade: | Molybdenum, Oxide, Spot price; Europe, EXW |
| Price basis: | 57% min Mo – 0.5% Cu, 0.1% P, lead and sulfur |
| Credit/Payment terms: | EXW |
| Loading Location: | Cash/Net 30 |
| Type: | Major Europe ports/warehouse |
| Currency: | Spot |
| Weight Unit: | US dollar |
| Size: | Pounds of Mo |
| Timing: | 10 mt to 20 mt (partial and full truckloads) packed in bags or drums |
| Consumer Markets: | No more than 8 weeks forward Main |
| Pricing: | Western Europe terminals/locations |
| Duties/Tariffs: | Business reported by sellers to buyers – no inter-trade activity |
| Frequency: | Duty paid |
| | Bi-weekly, every Tuesday and Thursday |

Main Asia Ports Oxide CIF

DataLab Name:

| | |
|------------------------|---|
| Grade: | Molybdenum, Oxide, Spot price; Asia, Main ports, CIF |
| Price basis: | 57% min Mo – 0.5% Cu, 0.1% P, lead and sulfur |
| Credit/Payment terms: | CIF Main Asia Ports (other locations in the Asian region may be reflected in the assessment after normalisation) |
| Type: | Cash/Net 30 days |
| Currency: | Spot |
| Weight Unit: | US dollar |
| Size: | Pounds of Mo |
| Timing: | 10 mt to 20 mt (partial and full truckloads) packed in bags or drums |
| Main Consumer Markets: | No more than four weeks forward, with some leeway for holiday |
| Pricing: | Japanese, Chinese, S. Korean terminals/locations (other locations in the Asian region may be reflected in the assessment after normalisation) |
| Duties/Tariffs: | Business reported by sellers to buyers – no inter-trade activity |
| Frequency: | Duty paid |
| | Weekly, every Friday |

EU Moly Metal DDP

DataLab Name:

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

Noble Alloys & Minor Metals

Ferrotitanium

US FeTi 68-72% Ti EXW

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

EU FeTi 68-72% Ti DDP

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

Ferrotungsten

US FeW 72-75% W EXW

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

EU FeW 72-75% W DDP

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

| | |
|------------------------|--|
| Weight Unit: | Kilograms of W |
| Size: | Minimum 2 mt |
| Timing: | No more than 8 weeks forward |
| Main Consumer Markets: | European terminals/locations |
| Pricing: | Business reported by sellers to buyers – no inter-trade activity |
| Duties/Tariffs: | Duty paid |
| Frequency: | Bi-weekly, every Tuesday and Thursday |

Ferrovanadium

US FeV 80% V EXW

DataLab Name:

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

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

EU FeV 80% V DDP

DataLab Name:

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

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

Tungsten

China FeW 72-75% W FOB

DataLab Name:

Ferrotungsten, 72-75% W, Spot price; China, FOB

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

China tungsten concentrate 65% WO3 – domestic DAP

| | |
|------------------------|---|
| DataLab Name: | Tungsten Ore, 60% WO3, Spot price; China, DAP |
| Grade: | WO3: 65% max; S: 0.8% max; P: 0.10% max; As: 0.15% max; Mo: 0.05% max; Ca: 5% max; Mn: 1.5% max; Cu: 0.25% max; Sn: 0.25% max; SiO2: 7.0% max |
| Price basis: | Per mt, delivered place, mainly Jiangxi |
| Credit/Payment terms: | Cash |
| Loading Location: | Producing plant |
| Type: | Spot |
| Currency: | RMB |
| Weight Unit: | Tonne |
| Size: | 50t min |
| Timing: | n/a |
| Main Consumer Markets: | Middle and east China |
| Pricing: | Business reported by sellers to buyers, including producers to traders |
| Duties/Tariffs: | VAT included, any other duties excluded |
| Frequency: | Bi-weekly, every Tuesday and Thursday |

China APT 88.5% DAP

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

China APT 88.5% WO3 FOB

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

Vanadium**China V2O5 98% V DAP (dom.)**

| | |
|-----------------------|---|
| DataLab Name: | Vanadium, V2O5 98% V, Spot price; China, DAP |
| Grade: | 98% V |
| Price basis: | DAP China |
| Credit/Payment terms: | Cash/Net 30 |
| Loading Location: | Major Chinese ports |
| Type: | Spot |
| Currency: | Chinese RMB |
| Weight Unit: | Tonne |
| Size: | 5 mt to 10 mt |
| Timing: | No more than four weeks forward, with some leeway for holiday |

| | |
|------------------------|--|
| Main Consumer Markets: | Chinese inland terminals/locations |
| Pricing: | Business reported by sellers to buyers – no inter-trade activity |
| Duties/Tariffs: | Duty paid |
| Frequency: | Bi-weekly, every Tuesday and Thursday |

Minor Metals

US Antimony 99.65% Sb EXW

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

EU Antimony 99.65% Sb EXW

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

US Bismuth 99.99% Bi EXW

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

EU Bismuth 99.99% Bi EXW

| | |
|-----------------------|--|
| DataLab Name: | Bismuth, 99.99% Bi, Spot price; Europe, ex-warehouse |
| Grade: | 99.99% min Bi ingot/shot |
| Price basis: | EU ex-warehouse |
| Credit/Payment terms: | Cash/Net 30 |
| Loading Location: | Rotterdam |
| Type: | Spot |
| Currency: | US dollar |

| | |
|------------------------|--|
| Weight Unit: | Pounds |
| Size: | 1 mt to 5 mt (small volume lots) |
| Timing: | No more than 8 weeks forward |
| Main Consumer Markets: | EU inland terminals/locations |
| Pricing: | Business reported by sellers to buyers – no inter-trade activity |
| Duties/Tariffs: | Duty paid |
| Frequency: | Bi-weekly, every Tuesday and Thursday |

US Indium 99.99% In EXW

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

EU Indium 99.99% In EXW

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

US Selenium 99.5% Se EXW

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

EU Selenium 99.5% Se EXW

| | |
|-----------------------|--|
| DataLab Name: | Selenium, 99.5% Se, Spot price; Europe, ex-warehouse |
| Grade: | 99.5% min Se – min 200 mesh |
| Price basis: | EU ex-warehouse |
| Credit/Payment terms: | Cash/Net 30 |
| Loading Location: | Rotterdam |
| Type: | Spot |

| | |
|------------------------|--|
| Currency: | US dollar |
| Weight Unit: | Pounds |
| Size: | 500kg to 5 mt (small lot transactions) |
| Timing: | No more than 8 weeks forward |
| Main Consumer Markets: | EU inland terminals/locations |
| Pricing: | Business reported by sellers to buyers – no inter-trade activity |
| Duties/Tariffs: | Duty paid |
| Frequency: | Bi-weekly, every Tuesday and Thursday |

*Please note that ceased prices are removed from this specifications

Glossary of Abbreviations

INCO TERM RULES FOR ANY MODE OR MODES OF TRANSPORT:

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

INCO TERM RULES FOR SEA AND INLAND WATERWAY TRANSPORT:

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

COUNTRY ABBREVIATIONS USED:

We use ISO 3166 alpha-2 standard country codes