

Methodology and Specifications for *Briefing: Sulphur, Briefing: Sulphuric Acid, Regional Briefing: US and Canada, Regional Briefing: Southern Africa*
Last Updated: July 2023

Introduction

Acuity Commodities (Acuity) regularly assesses sulphur and sulphuric acid prices for its market reports. These prices are reported in addition to data and accompanying analysis. Acuity ensures there is always more than one qualified employee who possesses the relevant levels of expertise for each assessed market to maintain continuity.

This Methodology and specifications guide is designed to give an overview of our general procedures and a clear description of how Acuity assesses prices. This Methodology is routinely reviewed for accuracy and market appropriateness. The Methodology is reviewed annually at a minimum with the month and year of the most recent update included in the published Methodology. When conducting the review, Acuity will consider the views of relevant stakeholders.

Acuity's Methodology is publicly available on its website:

<https://www.acuitycommodities.com/methodologyandcompliance>. Market participants are encouraged to submit feedback on the Methodology, including recommending any important changes. Feedback is welcome at any time and will be considered during the annual review at a minimum.

Outside of the annual review, there could be changes that result from factors such as adding a price assessment or based on feedback from market participants as reviewed by co-founders Fiona Boyd and Freda Gordon. In addition, when Acuity is considering a price assessment change, such as adding or retiring a price assessment, it posts a notice in the impacted report for several issues welcoming feedback from market participants.

General procedures

Acuity produces price assessments that represent market value based on confirmed business, firm offers and firm bids. In the absence of firm pricing indications, such as during times of market illiquidity, prices will be notionally assessed based on price ideas heard in the market from both sellers and buyers. Notional pricing will also be supported by achievable pricing in comparable markets and corresponding likely netbacks or delivered prices.

Acuity welcomes and encourages market participants to submit market data and ensures confidentiality of data that is submitted. Acuity will use the data as part of the price assessment process at our discretion, which can involve discussion with additional market participants without disclosing who submitted the initial data.

Data and information collected is stored on a secure network, according to Acuity's policies and procedures. Acuity archives notes collected from all forms of market survey and keeps record of how the price assessments are derived. All documents, notes, and internal data are retained on a secure, internal drive for at least five (5) years.

When data is submitted, the following information is required. If omitted, it will be requested for it to be taken into consideration in any price assessment:

- Price (either actual paid, actual sold, firm bid* or firm offer*)
- Transaction size (in metric tonnes (t) or appropriate measure)
- Load date of cargo/parcel
- Origin
- Destination
- Product specifications (limits described in the "Product specifications" section)
- Any non-standard terms or other points of consideration

Data is accepted via telephone, email, and other electronic communication and through face-to-face meetings.

Acuity conducts a survey of market participants through the communication methods described above. Acuity seeks to collect, confirm, and analyse as much information as possible by surveying a fair ratio of buyers, sellers, traders and other parties. The purpose of the survey process is to discover actual concluded business, firm offers, firm bids or notional price ideas which will be used to support the assessment process.

Acuity expects any individual who is submitting price data to be considered in a price assessment to be familiar with Acuity's published Methodology and Compliance Manual. It is also assumed that any information submitter holds the necessary qualifications and experience to provide pricing information to Acuity. Acuity reserves the right to bar any individual or company who purposefully report false or speculative data from data submission in the future.

Any submitted data or information gathered through the survey process that meets Acuity's Methodology standards will be considered when determining a final price assessment. This includes scrutiny by Acuity to ensure the prices provided for assessment are bona fide, executed at arm's length and not at an intracompany price. The price assessment includes transactions evaluated on a weighted basis.

When making a final price assessment, priority is given to fully verifiable and transparent market information, such as a transaction confirmed by both counterparties, followed by firm bids and offers and finally, notional price ideas. This survey process ensures prices are calculated consistently, which helps avoid risk of any key submitter dependency.

Acuity does not require a minimum number of data points for an assessment period. A minimum threshold is not established due to the opaque nature of the commodity markets Acuity assesses, limiting availability of transaction data.

In the price table that appears in each issue, each price assessment will be noted as follows:

- A = actual confirmed business
- FB = firm bid*
- FO = firm offer*
- N = notional

*Acuity's definition of a firm bid or firm offer is the price level at which a party intends to enter into an actual transaction. It is not intended to represent notional price ideas heard in the market place.

The notation in the table of what is supporting the price assessment is Acuity's commitment to fully clarify price discovery.

If both confirmed business and firm bids/offers support an assessment, this will be noted in the table and the analysis in the report will provide clarity of the data underpinning the assessment.

Ultimately Acuity uses its professional judgment to support price assessments which includes analysing data and information to determine if it meets specific requirements and is not considered a "one-off" or "distressed" event. Acuity's assessments reflect repeatable market value at the close of the assessment window, which is defined as the end of play of the publishing day of the specific report in the UK.

The two co-founders of Acuity, Fiona Boyd and Freda Gordon, oversee the price assessment process, including reviewing work of its other price assessors. Boyd and Gordon have extensive experience in assessing prices through previous roles at price reporting agencies. Boyd began her coverage of the sulphur and sulphuric acid markets, including price assessments, in 2008 while Gordon commenced in 2010.

Spot prices are for shipments to be loaded within 30 days and contract prices are for the time periods specified. For sulphur, cargoes of at least 10,000t are considered when assessing prices, unless otherwise noted. For sulphuric acid, part cargoes as small as a few thousand tonnes and cargoes up to 30,000t are considered when assessing price.

Pricing data received between publication of the prior issue and current issue is considered when assessing prices.

Acuity regularly reviews the competence and quality of its price assessors through annual internal staff review, and offers training to ensure assessors have the skills and tools to conduct assessments in a consistent and unbiased manner. Assessments are documented by internal Assessment Tables, designed to let the assessor uncover, normalise, and verify actual deals, firm bids, and firm offers against the Acuity Methodology. These tables are subject to weekly review by other approvers to ensure consistency and reliability throughout the assessment process.

Prices are assessed in US dollars (\$) per metric tonne (t), unless otherwise noted. In certain cases, Acuity may convert its assessments to other currencies or units of measure for comparison purposes. Such conversion factors will accompany any such analysis.

Acuity uses Incoterms as published by the International Chamber of Commerce (ICC). These terms include free on board (FOB) and cost and freight (CFR). Definitions of such terms are available on ICC's website <https://iccwbo.org>.

Product specifications

Sulphur (solid)

- Solid refers to granular, prilled and formed product. Crushed bulk and slate material are not considered, unless otherwise noted
- Purity on a dry basis minimum 99.5% by weight
- Ash content maximum 0.05% by weight
- Moisture content maximum 0.5% by weight

Sulphuric acid

- Smelter-based sulphuric acid and sulphur-based sulphuric acid
- 93-98% grade
- Iron concentration of less than 50 parts per million (ppm)
- Nitrate concentration of less than 5ppm
- Mercury concentration of less than 1ppm
- Arsenic concentration of less than 1ppm

Sulphuric acid prices usually represent the quality or grade of acid that is accepted in that market with price offers, bids and ideas typically discussed accordingly. For example, if a tender is for 98% grade acid, then those are the price ideas being discussed rather than on a 100% basis.

Price assessments**Sulphur prices assessed in *Briefing: Sulphur*
Molten – contract**

- Tampa quarterly contract – \$/long ton (lt) DEL
 - This price assessment is agreed on a quarterly basis between the major consumer of sulphur in the US Mosaic and major US refiners. The price is agreed on a quarterly calendar basis but is not negotiated and settled until the first month of the quarter (January, April, July, October). The price is settled by the end of the first month of the quarter. Acuity will publish the price assessment in the publication following the settlement – which could fall in the second month of the new quarter. The assessment will only be changed once its settlement is confirmed by both the buy and sell sides.
- Benelux quarterly contract – \$/t CFR
 - This price range assesses inland barge deliveries and rail deliveries and is agreed on a quarterly basis between major sellers and buyers in the Benelux region. The price typically falls in a broad range because of varying contractual sizes, travel distances and corresponding freight rates under such contracts. If the range of all reported prices by the buy and sell sides is deemed too wide, Acuity may assess the range on a weighted basis. This price assessment will only be changed once its settlement is confirmed by the major buyers and sellers, typically between the end of a quarter and the start of the next.
- Northwest Europe quarterly contract – \$/t CPT
 - This price range assesses inland road deliveries within northwest Europe and is agreed on a quarterly basis between major sellers and buyers. The price typically falls in a broad range because of varying contractual sizes, travel distances and corresponding freight rates under such contracts. If the range of all reported prices by the buy and sell sides is deemed too wide, Acuity may assess the range on a weighted basis. This price assessment will only be changed once its settlement is confirmed by the major buyers and sellers, typically between the end of a quarter and the start of the next.

Solid – spot

- China granular spot – \$/t CFR
 - This price assessment represents the level at which spot sales have or could transact for granular sulphur only from any offshore origin to be received at any port in southern, river and/or northern China.
- China granular and crushed lump spot – \$/t CFR
 - This price assessment represents the level at which spot sales have or could transact for granular and crushed lump sulphur from any offshore origin to be received at any port in southern, river and/or northern China. The assessment was previously named "China spot import price".

- China river spot – CNY/t EXW
 - This price assessment, on a CNY/t ex-warehouse basis, represents the level at which spot sales have or could transact for solid sulphur to be received at any ports along the Yangtze river in China, including Zhenjiang. Sales in the range of 3,000-10,000t are considered.
- India east coast spot – \$/t CFR
 - This price assessment represents the level at which spot sales have or could transact for solid sulphur from any offshore origin to be received at any port on the east coast of India.
- Indonesia spot – \$/t CFR
 - This price assessment represents the level at which spot sales have or could transact for solid sulphur from any offshore origin to be received at any port in Indonesia.
- Middle East spot – \$/t FOB
 - This price assessment represents the level at which spot sales have or could transact for solid sulphur to be loaded at any port in the Middle East, including Red Sea and Persian Gulf ports. Iranian sales are excluded from this assessment.
- Iran granular and crushed lump spot – \$/t FOB
 - This price assessment represents the level at which spot sales have or could transact for granular and crushed lump sulphur to be loaded at any port in Iran. Sales of Turkmen granular and crushed lump sulphur out of Bandar Abbas, Iran are included. The assessment was previously named "Iran spot export price".
- Mediterranean granular and crushed lump spot – \$/t CFR
 - This price assessment represents the level at which spot sales have or could transact for granular and crushed lump sulphur from any offshore origin to be received at ports bordering the Mediterranean Sea. Only cargoes of at least 10,000t are considered. Sales to Morocco, Tunisia, Israel and Lebanon are covered in this assessment. The assessment was previously named "Mediterranean spot import price".
- Mediterranean granular and crushed lump spot (under 10kt) – \$/t FOB
 - This price assessment represents the level at which spot sales of under 10,000t have or could transact for granular and crushed lump sulphur to be loaded at any port bordering the Mediterranean Sea. The assessment was previously named "Mediterranean spot export price (under 10kt)".
- Mediterranean granular and crushed lump spot (under 10kt) – \$/t CFR
 - This price assessment represents the level at which spot sales of under 10,000t have or could transact for granular and crushed lump sulphur from any offshore origin to be received at ports bordering the Mediterranean Sea. The assessment was previously named "Mediterranean spot import price (under 10kt)".
- Richards Bay spot – \$/t CFR
 - This price assessment represents the level at which spot sales have or could transact for solid sulphur from any offshore origin to be received at Richards Bay, South Africa. The assessment was previously named "South Africa spot price".

- Dar es Salaam spot – \$/t CFR
 - This price assessment represents the level at which spot sales have or could transact for spot sulphur from any offshore origin to be received at Dar es Salaam, Tanzania.
- Baltic spot – \$/t FOB
 - This price assessment represents the level at which spot sales have or could transact for solid sulphur to be loaded at any Baltic port, including Ust Luga in Russia and Gdansk in Poland.
- Brazil spot – \$/t CFR
 - This price assessment represents the level at which spot sales have or could transact for solid sulphur from any offshore origin to be received in Brazil.
- US Gulf Coast spot – \$/t FOB
 - This price assessment represents the level at which spot sales have or could transact for solid sulphur to be loaded at terminals in Texas (Beaumont, Corpus Christi or Galveston) and/or Louisiana (Faustina).
- Vancouver spot – \$/t FOB
 - This price assessment represents the level at which spot sales have or could transact for solid sulphur to be loaded at the two terminals in Vancouver.

Solid – contract

- Kuwait monthly contract – \$/t FOB
 - This price assessment, also known as the Kuwait Sulphur Price (KSP), represents the monthly lifting price for solid sulphur to be loaded at Mina Al Ahmadi, announced by Kuwait Petroleum Corporation in Kuwait at the end of the preceding month or the start of the current month. The assessment will be changed following the official announcement by the seller.
- Qatar monthly contract – \$/t FOB
 - This price assessment, also known as the Qatar Sulphur Price (QSP), represents the monthly lifting price for solid sulphur to be loaded at Ras Laffan or Mesaieed, announced by Qatar Chemical and Petrochemical Marketing and Distribution Company (Muntajat) in Qatar at the end of the preceding month or the start of the current month. The assessment will be changed following the official announcement by the seller.
- United Arab Emirates (UAE) monthly contract – \$/t FOB
 - This price assessment, also known as the Official Selling Price (OSP), represents the monthly lifting price for solid sulphur to be loaded at Ruwais, announced by Adnoc in the UAE at the end of the preceding month or the start of the current month. The assessment will be changed following the official announcement by the seller.

- Middle East quarterly contract – \$/t FOB
 - This price assessment is agreed on a quarterly basis between major sulphur producers in the Middle East and their contract holders, including traders and end-users. This price assesses both FOB contracts and netbacks of CFR contracts. The assessment will only be changed once its settlement is confirmed by both the buy and sell sides.
- Morocco/Tunisia quarterly contract – \$/t CFR
 - This price assessment is agreed on a quarterly basis between Moroccan and Tunisian sulphur buyers and their major suppliers, including producers and traders. The assessment will only be changed once its settlement is confirmed by both the buy and sell sides.

Sulphur prices assessed in *Regional Briefing: US and Canada*
Spot

- US Gulf Coast spot – \$/t FOB
 - This assessment will reflect the price as assessed in the preceding issue of *Briefing: Sulphur* which is published every Wednesday throughout the year.
- Vancouver spot – \$/t FOB
 - This assessment will reflect the price as assessed in the preceding issue of *Briefing: Sulphur* which is published every Wednesday throughout the year.

Contract

- Tampa quarterly contract – \$/long ton (lt) DEL (molten)
 - Acuity will publish the price assessment which appeared in the preceding issue of *Briefing: Sulphur* even if the price is settled and confirmed between the publication of *Briefing: Sulphur* and *Regional Briefing: US and Canada* although any price settlement would be discussed in text.

Sulphur prices assessed in *Regional Briefing: Southern Africa*
Spot

- Richards Bay spot – \$/t CFR
 - This assessment will reflect the price as assessed in the preceding issue of *Briefing: Sulphur* which is published every Wednesday throughout the year.
- Richards Bay bagged spot – \$/t FCA
 - This price assessment represents the level at which spot sales have or could transact for bagged sulphur from a seller's warehouse at Richards Bay, South Africa. Sales in the range of 2,000-10,000t are considered.
- Dar es Salaam spot – \$/t CFR
 - This price assessment will reflect the price as assessed in the preceding issue of *Briefing: Sulphur* which is published every Wednesday throughout the year.
- Dar es Salaam containers spot – \$/t CFR
 - This price assessment represents the level at which spot sales have or could transact for sulphur transported in containers from any offshore origin to be received at Dar es Salaam, Tanzania.

- Dar es Salaam spot – \$/t FCA
 - This price assessment represents the level at which spot sales have or could transact for sulphur from a seller’s warehouse at Dar es Salaam, Tanzania. Sales in the range of 2,000-5,000t are considered.
- Beira spot – \$/t CFR
 - This price assessment represents the level at which spot sales have or could transact for sulphur from any offshore origin to be received at Beira, Mozambique. Sales in the range of 20,000-30,000t are considered.
- Beira spot – \$/t FCA
 - This price assessment represents the level at which spot sales have or could transact for sulphur from a seller’s warehouse at Beira, Mozambique. Sales in the range of 5,000-10,000t are considered.
- Ndola spot – \$/t FCA
 - This price assessment represents the level at which spot sales have or could transact for sulphur from a seller’s warehouse at Ndola, Zambia. Sales in the range of 2,000-5,000t are considered.
- Lubumbashi spot – \$/t DAP
 - This price assessment, on a delivered at place (DAP) basis, represents the level at which spot sales have or could transact for sulphur delivered at Lubumbashi, Democratic Republic of the Congo (DRC). Our assessment excludes FERI (Fiche Electronique de Renseignement à l’importation), which is a compulsory certificate required to clear cargo in the DRC. Sales in the range of 2,000-10,000t are considered.
- Likasi spot – \$/t DAP
 - This price assessment, on a delivered at place (DAP) basis, represents the level at which spot sales have or could transact for sulphur delivered at Likasi, DRC. Our assessment excludes FERI. Sales in the range of 2,000-10,000t are considered.
- Kolwezi spot – \$/t DAP
 - This price assessment, on a delivered at place (DAP) basis, represents the level at which spot sales have or could transact for sulphur delivered at Kolwezi, DRC. Our assessment excludes FERI. Sales in the range of 2,000-10,000t are considered.
- Middle East spot – \$/t FOB
 - This assessment will reflect the price as assessed in the preceding issue of *Briefing: Sulphur* which is published every Wednesday throughout the year.
- Baltic spot – \$/t FOB
 - This assessment will reflect the price as assessed in the preceding issue of *Briefing: Sulphur* which is published every Wednesday throughout the year.

Contract

- Kuwait monthly contract – \$/t FOB
 - This assessment will reflect the price as assessed in the preceding issue of *Briefing: Sulphur* which is published every Wednesday throughout the year.
- Qatar monthly contract – \$/t FOB
 - This assessment will reflect the price as assessed in the preceding issue of *Briefing: Sulphur* which is published every Wednesday throughout the year.
- UAE monthly contract – \$/t FOB
 - This assessment will reflect the price as assessed in the preceding issue of *Briefing: Sulphur* which is published every Wednesday throughout the year.

Sulphuric acid prices assessed in *Briefing: Sulphuric Acid*

Spot

- Japan/South Korea spot – \$/t FOB
 - This price assessment represents the level at which spot sales have or could transact for smelter acid to be loaded at any port in Japan and South Korea.
- Northwest Europe spot – \$/t FOB
 - This price assessment represents the level at which spot sales of at least 10,000t have or could transact for smelter acid to be loaded at any port along the Atlantic coast of Europe to offshore markets.
- China spot – \$/t FOB
 - This price assessment represents the level at which spot sales have or could transact for smelter acid to be loaded in China. The ports include, but are not limited to, Fangcheng, Longkou, Putian and Rugao.
- India east coast spot – \$/t CFR
 - This price assessment represents the level at which spot sales have or could transact for smelter acid from any offshore origin to be received at any port on the east coast of India.
- Indonesia spot – \$/t CFR
 - This price assessment represents the level at which spot sales have or could transact for smelter acid from any offshore origin to be received at any port in Indonesia.
- Brazil spot – \$/t CFR
 - This price assessment represents the level at which spot sales have or could transact for smelter acid from any offshore origin to be received at any port in Brazil.
- Chile spot – \$/t CFR
 - This price assessment represents the level at which spot sales have or could transact for smelter acid from any offshore origin, including Peru, to be received at the port of Mejillones, Chile as well as domestically produced smelter acid sold on a Mejillones basis only.

- Morocco spot – \$/t CFR
 - This price assessment represents the level at which spot sales have or could transact for smelter acid from any offshore origin to be received at Jorf Lasfar, Morocco.
- US spot – \$/t CFR
 - This price assessment represents a level at which spot sales have or could transact for sulphuric acid from any offshore origin to be received at terminals throughout the US in the states of California, Florida, Georgia, Louisiana, North Carolina and Texas.

Contract

- Northwest Europe quarterly contract (barge) – €/t CFR
 - This price assessment, in €/t, is agreed on a quarterly basis between major smelter acid sellers and buyers. This range only considers contracts of 15,000-50,000t/yr, delivered by barges. The assessment will only be changed once its settlement is confirmed by both the buy and sell sides.
- Northwest Europe quarterly contract (vessel) – €/t CFR
 - This price assessment, in €/t, is agreed on a quarterly basis between major smelter acid sellers and buyers. This range only considers contracts of 15,000-50,000t/yr, delivered by vessels. The assessment will only be changed once its settlement is confirmed by both the buy and sell sides.
- China quarterly contract – \$/t CFR
 - This price assessment is agreed on a quarterly basis between Chinese importers and major smelter acid producers in South Korea, and depending on market situation sometimes Japan. The assessment will only be changed once its settlement is confirmed by both the buy and sell sides.
- India east coast annual (fiscal) contract – \$/t CFR
 - This price assessment is agreed on an annual basis between major Indian smelter acid buyers, including and not limited to IFFCO and CIL, and their suppliers, including major producers and traders. The price is typically settled within the first quarter of the calendar year, or before the start of India's fiscal year. It will only be changed once its settlement is confirmed by both the buy and sell sides.
- Chile annual contract – \$/t CFR
 - This price assessment is agreed on an annual basis between major Chilean smelter acid buyers and their suppliers. Producers and traders supplying smelter acid from any offshore origin, including Peru, to be received at the port of Mejillones, Chile as well as domestically produced smelter acid sold on a Mejillones basis are considered in this assessment. The price is typically settled by the end of the year and will only be changed once its settlement is confirmed by both the buy and sell sides.

Sulphuric acid prices assessed in *Regional Briefing: US and Canada*

- US Gulf spot – \$/t CFR
 - This assessment will reflect the price as assessed in the preceding issue of *Briefing: Sulphuric Acid* which is published every Thursday throughout the year.

**Sulphuric acid prices assessed in *Regional Briefing: Southern Africa*
Spot**

- Richards Bay spot – ZAR/t FCA
 - This price assessment, on a ZAR/t FCA basis, represents the monthly price for sulphur-based sulphuric acid to be lifted from Richards Bay, announced by Foskor in South Africa at the end of the preceding month. The assessment will be changed following the official announcement by the seller. Sales up to 3,000t are considered.
- Walvis Bay spot – \$/t CFR
 - This price assessment represents the level at which spot sales have or could transact for smelter acid from any offshore origin to be received at Walvis Bay, Namibia.
- South Africa spot – ZAR/t FCA
 - This price assessment represents the level at which spot sales have or could transact for smelter acid to be lifted in South Africa. Sales up to 1,000t are considered.
- Zambia spot – \$/t FCA
 - This price assessment represents the level at which spot sales have or could transact for smelter acid to be lifted in Zambia. Sales up to 5,000t are considered.
- Kolwezi spot – \$/t DEL
 - This price assessment represents the level at which spot sales have or could transact for smelter acid to be delivered to Kolwezi, DRC. Sales up to 5,000t are considered.
- Japan/South Korea spot – \$/t FOB
 - This assessment will reflect the price as assessed in the preceding issue of *Briefing: Sulphuric Acid* which is published every Thursday throughout the year.

Retired price assessments

Sulphur prices assessed in *Briefing: Sulphur*

- China Direct Hedge sulphur swap – \$/t CFR
 - This price assessment was retired from July 20, 2022, as Direct Hedge suspended trading of this product. It used to represent the official sulphur swap prices published by Direct Hedge every Wednesday.
- China river Huaxicun sulphur monthly contract – CNY/t EXW
 - This price assessment was retired from June 2022 when Huaxicun ceased trading sulphur. It used to represent the official Huaxicun Commodity Exchange contract prices from the previous business day prior to publication.

- Middle East Direct Hedge sulphur swap – \$/t FOB
 - This price assessment was retired from July 20, 2022, as Direct Hedge suspended trading of this product. It used to represent the official sulphur swap prices published by Direct Hedge every Wednesday.
- Saudi Arabia monthly contract – \$/t FOB
 - This price assessment was retired from May 22, 2019, as Aramco Trading no longer published this price. It used to represent the monthly lifting price for solid sulphur to be loaded at Jubail, announced by Aramco Trading in Saudi Arabia at the end of the preceding month or the start of the current month.
- Brazil quarterly contract – \$/t CFR
 - This price assessment was retired from July 5, 2023, due to a lack of liquidity. It used to represent the quarterly contractual price agreed between Brazilian sulphur buyers and major producers/suppliers out of the Kazakhstan/Russia and Middle East/West Asia regions. Contract cargoes loaded from the US Gulf Coast were not included as pricing on those was typically agreed before laycan. The assessment would only be changed once its settlement was confirmed by both the buy and sell sides.

Phosphate prices assessed in *Briefing: Sulphur* and *Briefing: Sulphuric Acid*

- Tampa DAP – \$/t FOB
 - This assessment was retired from April 2022 as Mosaic no longer published this price on its website. It used to represent the price published by Mosaic on its Plant Nutrient Price Dashboard every Friday.
- Morocco DAP – \$/t FOB
 - This assessment was retired from April 2022 as Mosaic no longer published this price on its website. It used to represent the price published by Mosaic on its Plant Nutrient Price Dashboard every Friday.
- Brazil monoammonium phosphate (MAP)– \$/t CFR
 - This assessment was retired from April 2022 as Mosaic no longer published this price on its website. It used to represent the price published by Mosaic on its Plant Nutrient Price Dashboard every Friday.

Freight rates

Acuity assesses and publishes spot freight rates representative of actual fixtures or spot rates quoted in the market. The survey process is used with logistical providers and buyers of spot freight providing data used to support assessments. Spot freight is for cargoes that will load within 30 days and additional parameters are listed below. The low and high ends of the range for each route are published as well as the rate from the prior publication for comparison purposes. Spot freight for major seaborne/traditional routes which provide the most liquidity have been selected as follows.

Sulphur freight assessed in *Briefing: Sulphur*

- Middle East to India east coast, Brazil and Morocco/Tunisia – 30,000-40,000t
- Middle East to China and Indonesia – 30,000-50,000t
- Iran to China – 30,000-40,000t
- India west coast to China – 50,000t
- Black Sea to Brazil – 30,000-35,000t
- Black Sea to north Africa and China – 30,000-40,000t
- Baltic to Brazil – 30,000-35,000t
- Baltic to north Africa and China – 30,000-40,000t

Sulphur freight assessed in *Regional Briefing: Southern Africa*

- Middle East to Beira – 25,000-35,000t
- Middle East to Richards Bay – 50,000-60,000t

Sulphur freight assessed in *Briefing: Sulphur and Regional Briefing: US and Canada*

- US Gulf Coast to Brazil and Morocco – 35,000-40,000t
- Vancouver to China – 60,000-70,000t
- Middle East to Tampa – 35,000-45,000t
- Baltic to Tampa – 35,000-45,000t

Sulphur freight assessed in *Briefing: Sulphur and Regional Briefing: Southern Africa*

- Middle East to Richards Bay – 30,000-40,000t

Acid freight assessed in *Briefing: Sulphuric Acid*

- Japan/South Korea to India east coast, Indonesia, and Mexico west coast – 18,000-20,000t
- Japan/South Korea to Ras al Khair – 20,000-30,000t
- Japan/South Korea to Chile – 19,000-25,000t
- Philippines to India east coast and southeast Asia – 18,000-20,000t
- Mexico west coast to Brazil and Chile – 18,000-20,000t
- Mid China to Morocco – 25,000-30,000t
- Mid China to India east coast – 18,000-20,000t
- Mid China to Chile – 18,000-30,000t
- Mid China to Indonesia – 10,000-20,000t
- Mid China to Ras al Khair – 20,000-30,000t
- India west coast to Morocco – 18,000-20,000t

Acid freight assessed in *Briefing: Sulphuric Acid and Regional Briefing: US and Canada*

- Northwest Europe (includes Spain) to Brazil, Morocco and US Gulf Coast/East Coast – 18,000-20,000t

Acid freight assessed in *Regional Briefing: Southern Africa*

- Japan/South Korea to Walvis Bay – 15,000-20,000t

Exchange rates to USD

Acuity publishes a table showing value of the USD against the currencies listed below for the specific publications. These exchange rates are based on mid-market rates published by XE on their website <http://www.xe.com> at the close of prior day. Mid-market rates are neither buy or sell rates but are derived from the mid-point between the buy and sell rates from global currency markets, indicating the value of a currency that is not weighted towards buying or selling.

- Brazilian real (BRL) – all reports
- Canadian dollar (CAD) – all reports
- Chinese Yuan Renminbi (CNY) – all reports
- Euro (EUR) – *Briefing: Sulphur* and *Briefing: Sulphuric Acid*
- Indian rupee (INR) – *Briefing: Sulphur* and *Briefing: Sulphuric Acid*
- South African Rand (ZAR) – *Regional Briefing: Southern Africa*

Related prices

Commodity prices related to the sulphur and sulphuric acid are reported in Acuity's *Regional Briefing: US and Canada*, *Regional Briefing: Southern Africa*, *Briefing: Sulphur* and *Briefing: Sulphuric Acid* as follows:

- Tampa ammonia monthly contract – \$/t CFR
 - This price assessment is agreed on a monthly basis between phosphate producer Mosaic and Yara – its primary offshore ammonia supplier. The price is a monthly contract price and will be assessed and published once confirmed and the month commences as it is typically settled the prior month.
- Diammonium phosphate (DAP) New Orleans, Louisiana (NOLA) – \$/short ton (st) FOB
 - This price represents the DAP NOLA price for the upcoming futures contract month as of the close of the previous business day prior to publication as published by various outlets.
- WTI crude oil – \$/barrel (bbl)
 - This price represents the WTI crude oil price for the upcoming futures contract month as of the close of the previous business day prior to publication as published by various outlets.
- Brent crude oil – \$/barrel (bbl)
 - This price represents the Brent crude oil price for the upcoming contract month as of the close of the previous business day prior to publication as published by various outlets.

- Henry Hub natural gas – \$/million British Thermal Unit (Btu)
 - This price represents the Henry Hub spot price from the most recent day prior to publication as published by the US Energy Information Administration (EIA).
- Copper cash ask – \$/pound (lb)
 - This price represents the official London Metal Exchange (LME) midpoint between the bid and offer cash prices from the previous business day prior to publication. While this price is quoted by the LME in \$/t, Acuity converts it to \$/lb because that is the customary unit of measure in the North American market.
- Copper cash ask – \$/t
 - This price represents the official London Metal Exchange (LME) midpoint between the bid and offer cash prices from the previous business day prior to publication.
- Nickel cash ask – \$/t
 - This price represents the official London Metal Exchange (LME) midpoint between the bid and offer cash prices from the previous business day prior to publication.
- Zinc cash ask – \$/t
 - This price represents the official London Metal Exchange (LME) midpoint between the bid and offer cash prices from the previous business day prior to publication.

Southern Africa Sulphur Supply Chain Stress Index

Acuity created a Stress Index to reflect how efficiently the Southern African sulphur supply chain is meeting demand. It is assessed monthly and is published in *Regional Briefing: Southern Africa*. The Methodology for the Stress Index is available on Acuity's website: <https://www.acuitycommodities.com/methodologyandcompliance>.

Corrections procedure

Acuity is committed to promptly correcting any errors, including price assessments and other market information. We strive to provide independent analysis and increase transparency in the sulphur and sulphuric acid markets. As such, any questions or concerns from subscribers will be thoroughly reviewed by Acuity. We strongly encourage feedback from our customers.

Any authorised reader/user who has identified an error in any of Acuity's published reports including price assessments or written content should notify Acuity by email at info@acuitycommodities.com with the subject line including "Correction" with reference to the corresponding report. An authorised user is considered one working for a company that holds an active subscription to the publication connected to the compliant.

Once Acuity is aware of a potential correction, it will internally review the need of any correction. If a correction is warranted, including any price change that is made after the original assessment, Acuity will reissue the report and identify it as corrected, including the reason for the correction, and communicate to the market as soon as possible.

Separately, if Acuity through its own internal review determines a correction to any of its published reports is needed, including any price change that is made after the original assessment, Acuity will reissue the report and identify it as corrected, including the reason for the correction, and communicate to the market as soon as possible.

Complaints procedure

Disputes as to daily pricing determinations are not considered as formal complaints and are resolved by following our Corrections procedure.

In the event any authorised reader/user of Acuity's published reports should have a formal complaint, the following procedure is adhered to. A formal complaint is regarding whether a specific price assessment is representative of market value, proposed price assessment changes, applications of Methodology in relation to a specific price assessment, other editorial decisions in relation to price assessment processes or written content.

Any complaint should be submitted in written form to info@acuitycommodities.com with the subject line including "Complaint" with reference to the corresponding report. Once the complaint is received, Acuity will acknowledge receipt of the complaint in writing within three (3) working days and will determine which member of its team is responsible for the specified price assessment or written content. Once determined, another member of the team, an independent member of staff who is not subject of the complaint, in a senior or equal role will manage and resolve the complaint.

Resolution will be reached following a prompt investigation, with the outcome reported to the complainant and any other relevant parties in writing within fourteen (14) working days. In the event of a complex complaint, this may not be possible, but Acuity aims to resolve any complaint in a timely and fair manner.

In the event a complainant wishes to exercise the right to appeal Acuity's decision, this should be done no later than six (6) months after the original complaint was filed. An independent third party will be appointed by Acuity to reach an external resolution in a timely and fair manner.

The steps described above will be logged in Acuity's internal Complaint Register.

If a formal complaint results in a change in price, Acuity will communicate to the market as soon as possible following our Corrections procedure.

All documents relating to a complaint, including those submitted by the complainant, as well as Acuity's internal Complaint Register document is retained on a secure, internal drive for at least five (5) years.

Publication schedule

Briefing: Sulphur is published every Wednesday throughout the year, with the exception of the last week of the calendar year. If the schedule is to be altered because of events such as public holidays, a notice will be put in the publication for the two reports prior to the report that will be impacted.

Briefing: Sulphuric Acid is published every Thursday throughout the year, with the exception of the last week of the calendar year. If the schedule is to be altered because of events such as public holidays, a notice will be put in the publication for the two reports prior to the report that will be impacted.

Regional Briefing: US and Canada is published every other Monday throughout the year. If the schedule is to be altered because of events such as public holidays, a notice will be put in the publication for the two reports prior to the report that will be impacted.

Regional Briefing: Southern Africa is published on the first Tuesday of every quarter throughout the year. If the schedule is to be altered because of events such as public holidays, a notice will be put in the publication for the one report prior to the report that will be impacted.

Publication dates are subject to change in the event of unforeseen circumstances that limit Acuity's ability to adhere to its regular publication schedule. This includes circumstances such as natural disasters or any other situation that results in an interruption of business continuity in Acuity's operations. In the case of such an event, Acuity will communicate through postings on our website and/or direct emails.