

Price reporting methodology:

FEED ADDITIVES MARKET

Revised April 2025

INTRODUCTION

Expana has been publishing price assessment data for feed additives since 1999. Our clients pay an annual subscription fee to access our data. Subscribers include premixers, compound feed manufacturers, feed additive producers, distributors, traders, financial analysts and government institutions. We have developed this methodology to ensure that our price assessment data reliably and accurately reflects the true market value of the feed additives that we report on.

OBJECTIVE

Our goal is to produce price reports that are rigorous and reliable using a clearly defined and consistent methodology. We aim to make impartial price assessments that reflect the prevailing market value of the most commonly traded feed additives. We seek to provide unbiased information on market developments that is wholly independent of the interests of individual feed additive producers, resellers, traders, premixers and compound feed manufacturers.

USE OF DATA

Expana emphasises that our published price assessments, commentaries and market overviews refer to current and historical transactions only and should in no way be interpreted as forward-looking statements or indicators of future price development.

Subscribers understand and acknowledge that the price assessments published by Expana are purely indicative and do not constitute a recommendation to buy or sell any feed additive, financial instrument, commodity, security or other investment, or to engage in any transaction in any jurisdiction. We are not a securities broker, a financial advisor or an investment adviser.

Our data is not intended to be used as the basis for contractual commercial agreements and is also not intended for use as evidence in contractual conflicts. Users agree that all information published on our service is for educational purposes only. Decisions based on information contained in our service are the sole responsibility of the user. It is the responsibility of each individual user to verify and confirm all information published in Expana price reports and market overviews.

PUBLISHING SCHEDULE

Feedinfo commits to publishing its price reports a minimum of 50 weeks per year. Price updates for amino acids and vitamins are usually published on Tuesdays and

Thursdays unless public holidays or industry events fall on those days. Some price updates are published weekly (vitamin B1, vitamin B2, and choline chloride on Tuesdays; valine, vitamin B3, and vitamin B12 on Thursdays). Mineral reports (feed phosphates, copper sulfate, manganese sulfate, and zinc oxide) are usually published on Mondays.

ASSESSMENT PROCESS

Expana price assessments are based on information gathered from market participants. This information includes contract price negotiations, spot transactions, bids and offers, freight costs, and prices of related commodities. Our product specifications and trading terms are designed to be representative of industry standards.

Price assessments are intended to reflect the real transactable value of a given commodity over the course of the assessment period. Transaction data therefore takes precedence over bids and offers, with confirmed deals being accorded the highest priority. While transactions will usually form the basis for price assessments, in their absence the analyst will take bids and offers into account, and where these are scarce may have to assess a notional range based on prevailing market sentiment.

There are consistently fewer transactions in some spot markets than others owing to structural differences between the commodities we report on. The number of sources providing feedback can vary significantly depending on the time of year, as market activity can drop during holiday periods. While transaction data can therefore be difficult to obtain, even for extended periods, our policy is not to apply minimum data thresholds to the price assessment process.

Contract prices refer to contractual sales of material by producers—whether to distributors or directly to end-users—and are negotiated annually, biannually, quarterly or monthly. They can be agreed as a baseline from which discounts or premiums are offered to individual buyers depending on the volume of material purchased over the contract period.

Our analysts attempt to cross-check all transaction data and reserve the right to exclude from their price assessments any information deemed unreliable or unrepresentative of the market. This can include data which deviates significantly from the price range that we have identified during the assessment period. It can also include instances where a given transaction appears to have been negotiated in unusual circumstances that render it non-repeatable, or if special conditions are thought to apply.

Examples of this would include transactions involving very large or small volumes of material; product of unusual origin; exceptional geographic location; non-standard delivery (e.g. INCO) terms; timing of delivery; demurrage; non-standard product quality specifications (e.g. off-spec product); imminent product expiry date; special packaging; rebates; credit terms; regulatory issues; transactions between related parties, subsidiaries or affiliates; trading activity between parties who normally do not transact with each other; or additional products that fall outside the scope of the price assessment.

We review anomalous data on a regular basis in order to determine whether a pattern exists.

Each report includes a commentary in which the basis for the price assessment is discussed, along with relevant market information such as the supply-demand balance, recent import/export trends, updates on plant operations, changes in consumer behaviour, and any other factors that are likely to affect price development.

Expana does not make retrospective changes to its price assessments based on information received after publication. In order to meet its publication deadlines, Expana has an information cut-off time of 17:00 Central European Time (CET) on the day of publication for Asia and Europe price assessments, and 17:00 Eastern Standard Time (EST) on the day of publication for North and South America price assessments.

QUALITY CONTROL

All applicants for analyst positions at Expana are required to complete a price reporting test prior to being hired to ensure they have the necessary skills for the role. Successful applicants are required to undergo a full training programme before taking responsibility for price assessments and are subject to a six-month probation period.

All data submitted to us in any form that we subsequently use in the price assessment process is recorded by the analyst and then archived by Expana for a minimum period of five years.

It is company policy that all reports must be copyedited by another member of staff prior to publication.

At times when the analyst usually responsible for covering a given region is not available, their reports will be covered either by the Principal Analyst or by an analyst responsible for covering the same markets in a different region. A minimum of three analysts are trained to cover each report.

On a quarterly basis the Principal Analyst conducts a series of spot checks to verify that analysts are adhering consistently to the price assessment process set out in the methodology.

WHAT WE ASK OF OUR SOURCES

Expana is grateful for the support and assistance it receives from participants in the feed additives market. Without sources who provide comprehensive and accurate market information it would be impossible to create a transparent price discovery process. Expana analysts work hard to verify all information that is supplied to them, and the more sources they can call upon the easier it is for them to ensure that our reports are as complete and accurate as possible. We encourage all market participants to provide data to us and welcome all information that is provided in good faith.

While we seek to validate all the information we receive and verify all the sources with whom we are in contact, we politely request that market participants who submit data to Expana analysts further assist us by adhering to the following principles:

- Respond to enquiries from Expana staff in a timely manner whenever possible;
- Provide a comprehensive and truthful account of their market activity;
- Indicate clearly when information is unsubstantiated (i.e. rumour);
- Inform us when a source leaves their organisation and whom we should contact instead.

Please note that feed additive price data will only be accepted from active market participants who are verified as such by established market sources.

We recognise that it is not possible for us to reach out to all market participants due to practical limitations such as geography, corporate policy, language, time zones, etc.

We gauge the reliability of our sources based on various criteria, including the length of time the source has been contributing feedback to us, the level of industry experience of the individual, and the degree of reliability we have observed during previous exchanges. We are also sensitive to the role that a market participant might play in a specific context, conscious that their viewpoint can change depending on their trading position at any given time.

MARKET COMMUNICATION

Expana gathers information from a broad range of market participants, including feed additive producers, premixers, compound feed manufacturers, distributors and traders. Communications can take the form of telephone conversations, email exchanges, instant messenger conversations, or face-to-face meetings. We treat all communication with market participants as confidential.

Expana has a duty to its subscribers to maximise the amount of market information it obtains, and therefore does not regard as binding in any way attempts by companies to restrict communication with their employees.

Expana expects the highest standards of propriety from all market participants and regards all communications as being representative of the views of an individual's employer.

Expana staff are required to report any coercive or threatening communication from market participants or offers of inducements of any kind that are intended to influence an assessment. Where improper communication appears to have taken place, Expana will communicate in the first instance with senior management at the company or companies involved, and if necessary, with the relevant market authorities.

CORRECTIONS POLICY

Expana will issue a formal correction under the following circumstances:

Price assessment error: an assessed price that has been published incorrectly due to a typographical mistake or an error of calculation. Price assessment errors must come to light within one month of publication for a correction to be issued.

Factual error: a statement published in a commentary or market overview that is determined to be erroneous. Please note that Expana may amend typographical or grammatical errors or insert missing words without issuing a correction, but only if the amendment does not have a material impact on the meaning or the reader's likely interpretation of the statement. A decision may be taken not to issue a correction if the erroneous content is deemed to be too old or insignificant to make a correction worthwhile.

Technical error: an error resulting from a malfunction in any system used to produce or distribute Expana content.

Price assessments are made based on the best information available at the time. No correction will be

issued on the basis of information that is received after publication, or is subsequently amended, elaborated on, or corrected by the source.

Expana does not consider that a subscriber's disagreement with the information published or the judgement applied to it, or with the interpretation of the methodology, constitutes evidence that a mistake has been made, and no correction would be issued on this basis.

A statement can be ambiguous, or interpreted by the reader in multiple ways, without being factually incorrect. In such cases, Expana may rewrite, add to, or delete elements of the text to clarify its meaning. An explanatory note may be added to the report to highlight and explain the change, but no correction will be issued.

COMPLAINTS POLICY

Expana defines a formal complaint as a written expression of dissatisfaction with the standard of our service or products that has been submitted in line with this complaints policy.

Examples could include a complaint about whether a specific price assessment is representative of the market, how the methodology has been applied in relation to the price assessment process, or proposed changes to the methodology.

Complaints regarding our subscription fees are not covered by this complaints policy and should be addressed as part of normal commercial negotiations.

All complaints should be submitted in writing to complaintsEBP@expanamarkets.com and should clearly state that they are a complaint in line with the Expana complaints process. Communications should include as much relevant information as possible, in particular:

- Name(s) of the party or parties involved and their contact information;
- The nature of the complaint, together with details of the relevant reports, text or data;
- An explanation of how Expana staff have failed to adhere to the methodology;
- Details of failure in any other aspect of our service;
- Copies of any documents in support of the complaint;
- Previous correspondence with Expana staff that is relevant to the complaint.

Expana will acknowledge receipt of any complaint within two working days and will provide the contact details of the person responsible for investigating the complaint.

The designated person will provide at least an initial written response within seven days of receipt. If more time is needed to prepare a detailed written response, this will be indicated in the initial response. A detailed response will be provided within 28 days of receipt of the original complaint, although this may not be enough time to conduct a full investigation.

We encourage complainants to provide as much information as possible in order to avoid delays while we request any further information needed to progress the complaint.

Complaints will be investigated fairly, promptly and confidentially. In all cases, investigations will be conducted independently of any personnel who may be the subject of the complaint.

All complaints will be treated in the strictest confidence, but in some circumstances, we may need to verify details of transactions or trade negotiations with counterparties.

Expana policy is not to disclose sources of information without the agreement of those sources or disclose information passed to reporters in confidence. This includes any such information that may be the subject of a formal complaint.

Once the investigation is complete and a decision has been taken on any appropriate follow-up action, the designated person will inform the complainant of the outcome of the investigation and the actions to be taken (if any).

When a complaint about a price report or market overview is upheld, a correction will be issued in line with our corrections procedure. Corrections are issued only in cases when Expana finds that a factual, procedural, methodological, typographical, or mathematical error has been made by its staff.

Where a complaint indicates the need for a review of the methodology, the standard methodology consultation process will apply.

All correspondence relating to complaints will be archived for a minimum period of five years.

METHODOLOGY REVIEWS

Expana conducts internal reviews of the price reporting methodology as needed, taking subscriber feedback into account. Proposed changes that are deemed to be material are set out in an explanatory note in the relevant report for a minimum period of one month, during which comments are requested from subscribers. We encourage all subscribers to engage in this process. Once a decision has been taken, there will be a one-month notice period before any changes are implemented, during which they will be explained in the report. It should be noted that materiality in this context is subjective, meaning that the Principal Analyst must use professional judgement to determine materiality on a case-by-case basis.

Consultation responses will be made available to subscribers on request at the end of the consultation period, unless the submitter has requested that their response remain confidential. These responses will usually be anonymised before being sent to subscribers, unless the submitter chooses to waive their anonymity. In addition, we will draft a summary of the points that have been made, which will also be available on request. This summary may include reference to points made in confidential responses, but without attribution to companies or individuals.

While we will consider all consultation responses, there may be occasions on which we decide it is necessary to change our methodology against the wishes of some market participants.

On an annual basis the Principal Analyst undertakes a review of the methodology to ensure it remains relevant and up to date against market expectations and underlying processes. Any necessary material changes identified from this review are captured and passed through the standard consultation process.

Expana commits to holding a general methodology consultation at intervals not exceeding two years. The date of the previous general consultation and the scheduled date of the next general consultation are recorded at the top of the methodology document.

All previous versions of the methodology will be archived for a minimum period of five years.

AMINO ACIDS

Methionine 99% (Feed Grade – Solid)

Spot price assessment basis:

- FOB China Main Port (\$/kg)
- DDP China end-user (CNY/kg)
- DDP NW European end-user (€/kg)
- DDP US Midwest end-user (\$/kg)
- FOB São Paulo – Brazil (\$/kg)

Packing: 25kg, BB, Bulk

Delivery time: usually within 2-4 weeks

L-Lysine HCl 98% (Feed Grade)

Spot price assessment basis:

- FOB China Main Port (\$/kg)
- DDP China end-user (CNY/kg)
- DDP NW European end-user (€/kg)
- DDP US Midwest end-user (\$/kg)
- FOB São Paulo – Brazil (\$/kg)

Packing: 25kg, BB, Bulk

Delivery time: usually within 2-4 weeks

Note: For North and South America, prices for lysine HCl sold under international brands are assessed separately from lysine HCl sold under Chinese brands, regardless of the country in which the product is manufactured (including China).

L-Lysine Sulphate 70% (Feed Grade)

Spot price assessment basis:

- FOB China Main Port (\$/kg) – excluding EU-bound cargoes
- DDP China end-user (CNY/kg)
- DDP NW European end-user (€/kg)
- FOB São Paulo – Brazil (\$/kg)

Packing: 25kg, BB, Bulk

Delivery time: usually within 2-4 weeks

L-Lysine Liquid 50% (Feed Grade)

Spot price assessment basis:

- DDP NW European end-user (€/kg)

Packing: IBC, Bulk

Delivery time: usually within 2-4 weeks

L-Threonine 99% (Feed Grade)

Spot price assessment basis:

- FOB China Main Port (\$/kg) – powder
- DDP China end-user (CNY/kg) – powder

- DDP NW European end-user (€/kg)
- DDP US Midwest end-user (\$/kg) – granules
- FOB São Paulo – Brazil (\$/kg)

Packing: 25kg, BB, Bulk

Delivery time: usually within 2-4 weeks

L-Tryptophan 98% (Feed Grade)

Spot price assessment basis:

- FOB China Main Port (\$/kg)
- DDP China end-user (CNY/kg)
- DDP NW European end-user (€/kg)
- DDP US Midwest end-user (\$/kg)
- FOB São Paulo – Brazil (\$/kg)

Packing: 10kg bags, 25kg bags, BB

Delivery time: usually within 2-4 weeks

L-Valine 96.5% (Feed Grade)

Spot price assessment basis:

- FOB China Main Port (\$/kg)
- DDP China end-user (CNY/kg)
- DDP NW European end-user (€/kg)
- DDP US Midwest end-user (\$/kg)
- FOB São Paulo – Brazil (\$/kg)

Packing: 10kg bags, 25kg bags, BB

Delivery time: usually within 2-4 weeks

VITAMINS

Vitamin A 1000 (Feed Grade)

Spot price assessment basis:

- FOB China Main Port (\$/kg)
- DDP China end-user (CNY/kg) – vitamin A 500
- DDP NW European end-user (€/kg)
- DDP US Midwest end-user (\$/kg)
- FOB São Paulo – Brazil (\$/kg)

Packing: 25kg bags/boxes, BB

Delivery time: usually within 2-4 weeks

Vitamin E 50% (Feed Grade)

Spot price assessment basis:

- FOB China Main Port (\$/kg)
- DDP China end-user (CNY/kg)
- DDP NW European end-user (€/kg)
- DDP US Midwest end-user (\$/kg)
- FOB São Paulo – Brazil (\$/kg)

Packing: 25kg bags/boxes, BB

Delivery time: usually within 2-4 weeks

Vitamin D3 500 (Feed Grade)

Spot price assessment basis:

- FOB China Main Port (\$/kg)
- DDP China end-user (CNY/kg)
- DDP NW European end-user (€/kg)
- DDP US Midwest end-user (\$/kg)
- FOB São Paulo – Brazil (\$/kg)

Packing: 25kg bags/boxes

Delivery time: usually within 2-4 weeks

D-Calpan/B5 (Feed Grade)

Spot price assessment basis:

- FOB China Main Port (\$/kg)
- DDP China end-user (CNY/kg)
- DDP NW European end-user (€/kg)
- DDP US Midwest end-user (\$/kg)
- FOB São Paulo – Brazil (\$/kg)

Packing: 25kg bags/boxes

Delivery time: usually within 2-4 weeks

Biotin 2% (Feed Grade – Non-soluble)

Spot price assessment basis:

- FOB China Main Port (\$/kg)
- DDP China end-user (CNY/kg)
- DDP NW European end-user (€/kg)
- DDP US Midwest end-user (\$/kg) – pure biotin
- FOB São Paulo – Brazil (\$/kg) – pure biotin

Packing: 25kg bags/boxes, BB

Delivery time: usually within 2-4 weeks

Vitamin B1 (Feed Grade)

Spot price assessment basis:

- FOB China Main Port (\$/kg)
- DDP China end-user (CNY/kg)
- DDP NW European end-user (€/kg)
- DDP US Midwest end-user (\$/kg)
- FOB São Paulo – Brazil (\$/kg)

Packing: 25kg bags/boxes

Delivery time: usually within 2-4 weeks

Vitamin B2 80% (Feed Grade)

Spot price assessment basis:

- FOB China Main Port (\$/kg)
- DDP China end-user (CNY/kg)
- DDP NW European end-user (€/kg)
- DDP US Midwest end-user (\$/kg)
- FOB São Paulo – Brazil (\$/kg)

Packing: 25kg bags/boxes

Delivery time: usually within 2-4 weeks

Vitamin B3 (Feed Grade)

Spot price assessment basis:

- FOB China Main Port (\$/kg)
- DDP China end-user (CNY/kg)
- DDP NW European end-user (€/kg)
- DDP US Midwest end-user (\$/kg)
- FOB São Paulo – Brazil (\$/kg)

Packing: 25kg bags/boxes

Delivery time: usually within 2-4 weeks

Choline Chloride (Feed Grade)

Spot price assessment basis:

- FOB China Main Port (\$/kg)
- DDP China end-user (CNY/kg)
- DDP NW European end-user (€/kg)
- DDP US Midwest end-user (\$/kg)
- FOB São Paulo – Brazil (\$/kg)

Packing: 25kg bags/boxes

Delivery time: usually within 2-4 weeks

Vitamin B12 (Feed Grade)

Spot price assessment basis:

- FOB China Main Port (\$/kg)
- DDP China end-user (CNY/kg)
- DDP NW European end-user (€/kg)
- DDP US Midwest end-user (\$/kg)
- FOB São Paulo – Brazil (\$/kg)

Packing: 25kg bags/boxes

Delivery time: usually within 2-4 weeks

MINERALS

Feed Phosphate

Spot and contract price assessment basis:

- FOB China Main Port (\$/tonne) – MCP
MCP spot prices
- FOB China Main Port (\$/tonne) – DCP
DCP spot prices
- FOB China Main Port (\$/tonne) – MDCP
MDCP spot prices
- DDP NW European end-user (€/tonne)
MCP spot prices
- DEL US Midwest end-user (\$/short ton)
MDCP monthly/quarterly contracts
- FOB Southern Brazil – Brazil (\$/tonne)
DCP spot prices
- FOB São Paulo – Brazil (BRL/kg)
DCP monthly/quarterly contracts

Packing: 25kg bags, BB, Bulk

Delivery time: usually within 2-4 weeks

Copper Sulphate (Feed Grade)

Spot price assessment basis:

- DEL NW European end-user (€/tonne)
- DDP US Midwest end-user (\$/lb)
- FOB São Paulo – Brazil (BRL/kg)

Packing: 25kg bags, BB

Delivery time: usually within 2-4 weeks

Manganese Sulfate Monohydrate (Feed Grade)

Spot price assessment basis:

- FOB China Main Port (\$/kg)
- DDP China end-user (CNY/kg)
- DDP NW European end-user (€/kg)
- DDP US Midwest end-user (\$/kg)
- CIF São Paulo – Brazil (\$/tonne)

Packing: 25kg bags/boxes

Delivery time: usually within 2-4 weeks

Zinc Oxide (Feed Grade)

Spot price assessment basis:

- FOB China Main Port (\$/kg)
- DDP China end-user (CNY/kg)
- DDP NW European end-user (€/kg)
- DDP US Midwest end-user (\$/kg)
- CIF São Paulo – Brazil (\$/tonne)

Packing: 25kg bags/boxes

Delivery time: usually within 2-4 weeks

Feed additives	Products covered in price reports and market overviews
Producer	Manufacturer of amino acids, vitamins or minerals
Distributor	Company engaged in the distribution of feed additives on behalf of specific producers
Premixer	Consumer of amino acids, vitamins and minerals
Compound feed manufacturer	Consumer of amino acids, vitamins and minerals either straight or incorporated into premixes
End-user	Premixer or compound feed manufacturer
Key account	Very large end-user that consumes significant volumes of feed additives
Reseller	End-user (premixer or compound feed manufacturer) that has resale activity
Trader	Company that buys/sells feed additives of various origins based on price differentials
Contract	Agreement to supply material over a set period of time, with prices negotiated on a monthly, quarterly or annual basis
Gross basis	Contract price before volume discounts are applied
Net basis	Contract price after some or all rebates are applied
Fall clause	Agreement whereby contract prices are adjusted downward in a falling market
Spot market	Transactions for cargoes purchased and priced individually
Small Bags	25kg bags on pallets
Big Bags (BB)	500-1,000kg bags on pallets
IBC	Intermediate bulk containers
Bulk	Silo truck bulk delivery
FTL	Full truck load quantity
LTL	Less than truck load quantity
FCA	Free carrier – product available on an ex-warehouse basis
FOB	Free on board – loaded on a vessel at the port of departure
CIF	Cost, insurance and freight for delivery to vessel destination
DEL	Delivered (inland)
DDP	Delivered duty paid to final destination
NW Europe (NWE)	Northwest Europe



Contact us

For more information on Expana's market quotations,
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