

	CURRENT FOB PRICE -CHINA *	EU MARKET PRICE INDICATOR Q2 2022
Lysine HCL (Western)	-	€ 2350 - 2650/Mt DDP
Lysine HCL HCL (Chinese)	\$ 1750 - 1825/Mt	€ 2200 - 2450/Mt DDP
Lysine Sulfate	\$ 1250 - 1350/Mt	€ 1750 - 1980/Mt DDP
Threonine powder	\$ 1680 - 1730/Mt	€ 2150 - 2450/Mt DDP
Threonine granular	\$ 1710 - 1760/Mt	€ 2180 - 2480/Mt DDP
Tryptophan	\$ 7650 - 8100/Mt	€ 8400 - 9200/Mt DDP
Betaine 95% HCL	\$ 2850 - 3200 /Mt	€ 3650 - 3950/Mt DDP
Choline chloride 50% silica	\$ 1450 - 1550/Mt	€ 2100 - 2450/Mt DDP

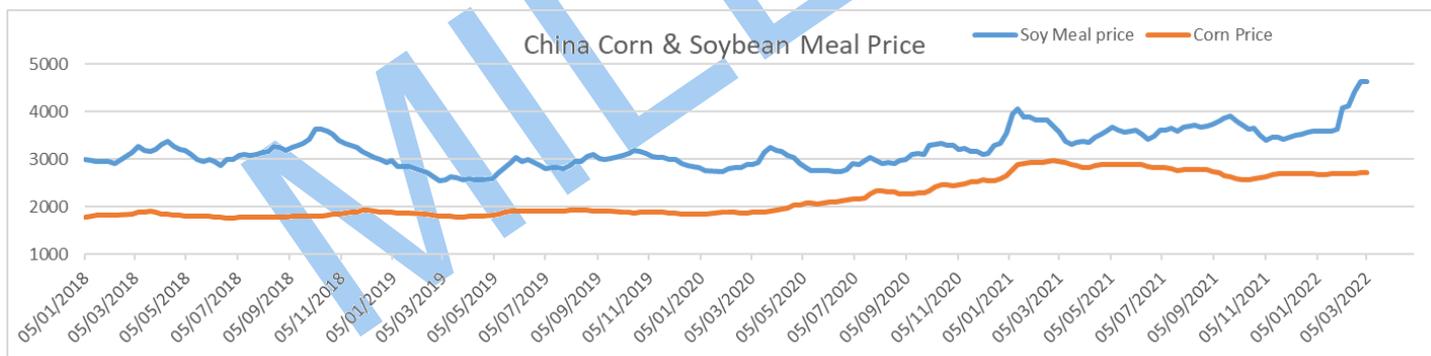
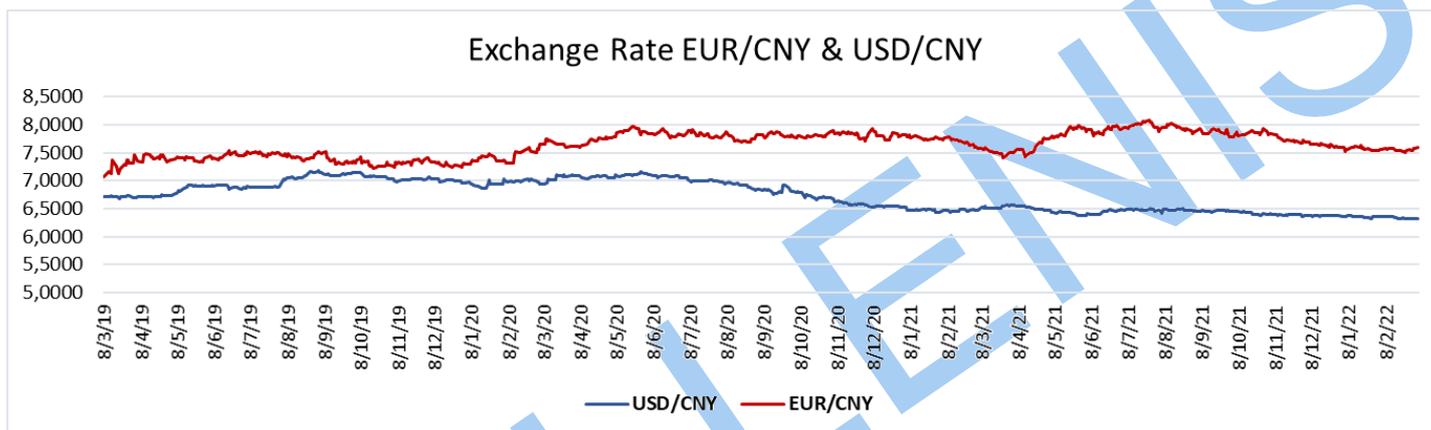
* The prices in USD are FOB prices. The prices in EURO are indications

General information:

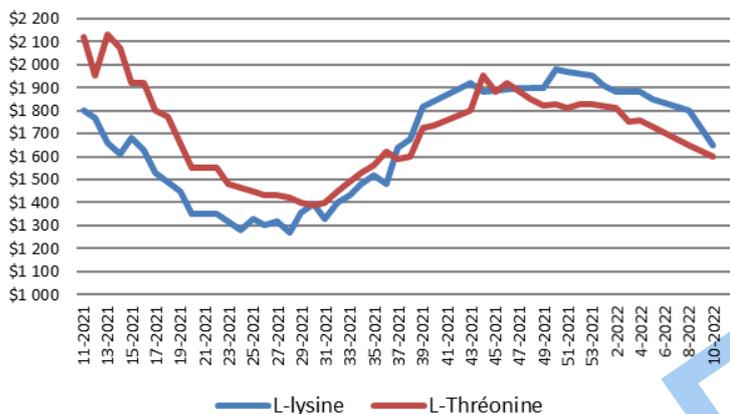
1/ Logistics: Easing is long overdue. Congestion at European ports persists, supported by increasing arrivals and concentrated in the main ports. The loading of boats departing from China is disrupted by Covid-19 cases detected among the crews (triggering additional quarantines or crew replacement). The cost of sea freight remains high (energy, global imbalance between flows), which increases the cost price of goods imported into Europe. Local transports are also strongly impacted by fuel surcharge increase and a lack of drivers

2/ Currencies: RMB 6.32 / \$1; \$1,10 / €1. We have entered a period of relative high volatility. At the same time, we are seeing a strengthening of the RMB against the dollar and the dollar against the euro, which contributes to the increase in our purchases expressed in euros. It will be necessary to be particularly attentive to the fluctuation of exchange rates in the coming weeks

3/ Production in China: the war in Ukraine could possibly drive up production costs: on the one hand, energy, a consequence of restrictions on Russian exports of gas and oil worldwide, and on the other hand, maize, fuel for fermentation in amino acid factories. China's policy of diversifying its maize sources, with a view to being less dependent on the US, was oriented towards Ukraine (estimated at 40%). It is directly impacted in the short term by the closure of ports on the Black Sea. In the longer term, agricultural harvests could be severely penalized by the general mobilization in Ukraine, reducing the quantities available for export greatly.



Lysine - Threonine FOB/Chine, \$/t



General context:

The easing of strained relations observed at the return of the Chinese New Year suddenly came to an end. The situation in Ukraine prompted Chinese amino acid producers to withdraw from the market for an entire week. Only local traders offered limited volumes on their secured stocks. Some producers are returning to business at relatively stable price levels, in contrast to recent events that are shaking up global markets. For how long? The interest of European buyers, who until now had a relatively wait-and-see position towards Q3 purchases, is reviving in the light of growing uncertainties.

Threonine:

Availability continues to improve gradually on the European market, accompanied by some downward price corrections. These have thus fallen below those of lysine HCl. Some players were waiting for confirmation of this trend for the 3rd quarter and were therefore delaying their purchases. The latest events in Ukraine have generated new uncertainties and triggered buyers to cover in recent days.

Tryptophan:

Chinese producers do not currently seem able to increase their positions in Europe and are content with a challenger role in a relatively stable and peaceful market. Tryptophan, due to geographical origins and sea routes, seems less exposed to current geopolitical hazards than other amino acids.

Lysine HCl:

In the aftermath of the Chinese New Year, the trend is slow to take shape. After a week of unlisted re-entry, the producers temporarily offered lower prices, but conditioned on restrictive terms (combined purchase of several amino acids). What will be the reaction of producers to the new uncertainties related to the war in Ukraine?

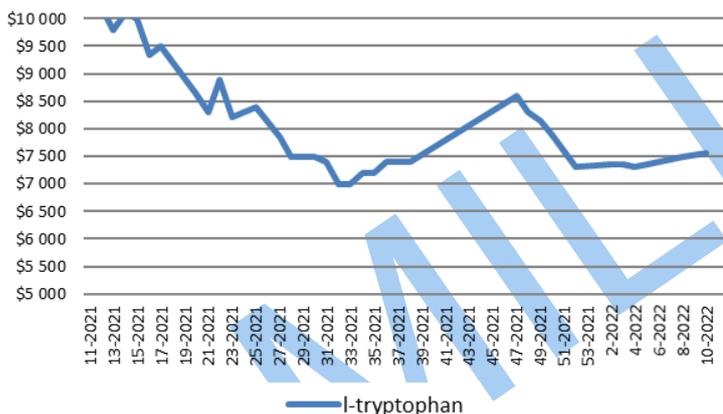
Lysine sulfate:

The lack of availability and competition makes lysine sulfate the least competitive form. The main producer is trying to make it more attractive by adopting a more aggressive pricing strategy on Q3, but the concern to secure supplies encourages buyers to also turn to other potentially more expensive origins.

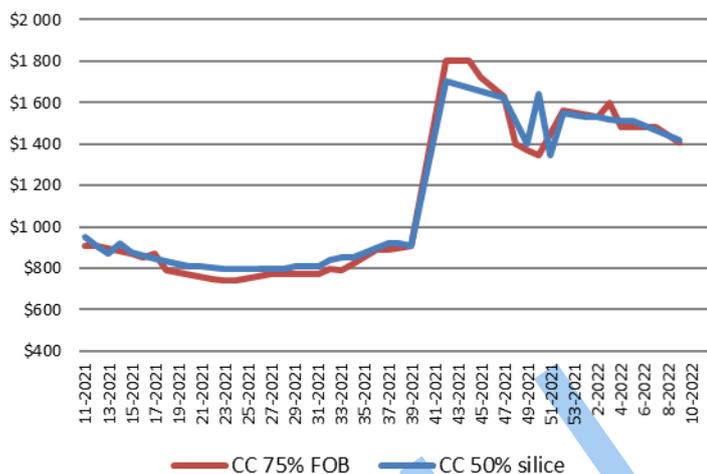
Liquid lysine:

Some producers experienced logistical or production disruptions, creating supply difficulties among end-users who had not sufficiently diversified their purchases. Q3 prices are in line with the firmness of Q2, which makes liquid an ever more competitive source of Lysine than sulfate.

Tryptophane FOB/Chine, \$/T



Choline Chloride FOB/Chine, \$/T



Choline chloride 50% silica and betaine HCL 95:

Despite already high prices, these synthetic chemicals could still be seriously impacted by the surge in oil and its derivatives. For choline 50, this trend will be supported by the increase in the price of silica.

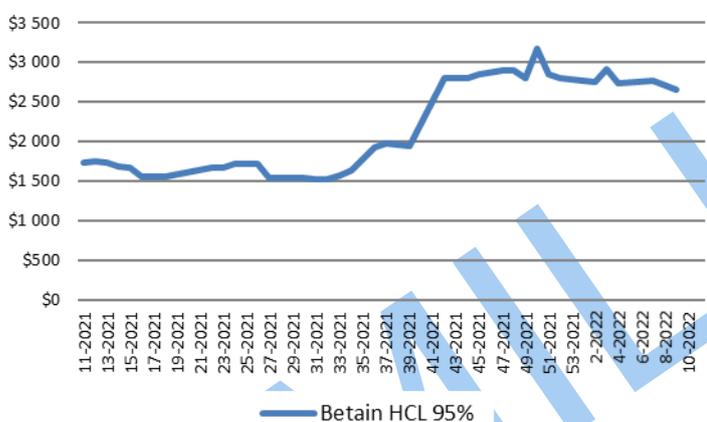
Arginine and Valine:

The supply/demand balance should be carefully monitored. The uptake is slow and market share is low despite the approvals obtained by new players, maintaining a strong dependence on market leaders while demand seems to be strengthening. The ability of the leaders to guarantee its availability on the European market will therefore still be decisive in the coming months.

EO & TMA Price



Bétaine HCL 95% FOB, \$/T



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