

Manganese sulfate Spotlight

September 19, 2024. Rob Searle, analyst

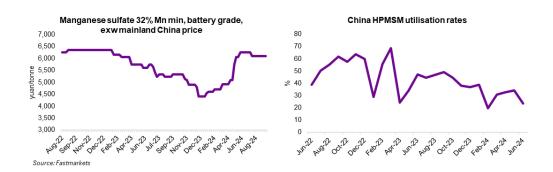
Outlook: Battery-grade manganese sulfate prices in mainland China were stable through summer. Elevated raw material costs due to a spike in high-grade manganese ore prices in mid-second quarter supported prices. Spot buying remained weak with operating rates at Chinese NCM pCAM plants running low during the summer lull. The market is awaiting a clear indication of firming spot demand in September and the fourth quarter of 2024. Lower than expected BEV sales growth in Western markets continues to add bearish sentiment to the outlook for HPMSM prices. Should a clear improvement in demand arise we expect the need for restocking to support price rises in 2025.

Prices stable through August

- Battery-grade manganese sulfate prices weakened in mid-July amid slow downstream demand and indications of improving high-grade manganese ore availability. Prices were down 1% in August.
- Since bottoming out in January 2024, prices have recovered 36%. The majority of these price gains were as a result of bullish raw material costs from firming manganese ore prices.

Operating rates at Chinese HPMSM sites remain low

- In response to lower NCM pCAM demand and slowing BEV sales growth in Western markets, China's HPMSM processors have run at lowered rates through 2024. Operating rates saw a significant cut in April 2024 in response to weak demand and pricing. Processing plants averaged 24% that month. Since then rates bottomed out in February 2024 at 20% as a result of business closures during the Lunar New Year holidays. Weak spot buying ahead of the summer period saw operating rates fall to 23% in June 2024. In the first half of the year utilization rates have averaged 30%, 8 points lower in the year to date.
- Low operating rates in China highlight the excess installed capacity within the country.
 Once demand and prices begin to recover in line with improving BEV demand, we expect the market to remain well supplied by processors located in China. This poses a challenge for the development of ex-China high-purity manganese projects in the second half of the decade. China's industry enjoys operating cost advantages over projects in Europe and North America.



High-grade manganese ore prices weaken

- Following price gains from April, the manganese ore high grade index, cif Tianjin
 weakened in August. Prices fell 20% when tightness in the market eased. Prices
 remained 64% higher year on year at the end of August. Manganese ore prices firmed
 in the second quarter of 2024 on supply disruption in Australia after South32's GEMCO
 operation in Western Australia was damaged by a cyclone. Production is not expected
 to return until early 2025.
- Bearish macroeconomic sentiment caused steel demand to slow in China. Expectations
 are for manganese ore prices in China to revert back to levels seen in 2023 of around
 \$4.50 per lb.

China's NCM pCAM production down year on year in August

- The NCM battery sector is the major end use market for battery-grade manganese sulfate. Year-on-year falls in China's NCM pCAM production has been a major driver behind the slowdown in HPMSM production over the last couple of months. China's NCM/NCA pCAM production stats highlight the slowdown compared with 2023.
- Production fell 21% and 7% in May and June 2024 respectively to coincide with slower buying heading into the summer months. In July, production rose 8%, but levels remain down 13% year on year.

Fundamentals

• The battery-grade manganese market was in surplus by 7,200 tonnes in 2023 with supply outstripping demand. Despite cutbacks at Chinese processing sites, availability of material was plentiful with prices responding bearishly. We believe a number of higher-cost processors in China remain out of the market. For this reason, we are forecasting a balanced market in 2024. As EV sales recover and NCM pCAM production picks back up to levels seen in 2023 we expect the market to be well supplied by the Chinese processing base.