

LITHIUM SULFATE MONOHYDRATE

CAS No. 10102-25-7

QS-PDS-1040 Revision: 00

Application Source of Lithia in ceramic compositions, solubilizer in photographic developer solutions, additive to Portland cements, and a tracer in chemical products.

Appearance Hygroscopic white crystals. White to slightly off white. Slightly lumpy to free flowing.

Product Specifications

Guaranteed

Li ₂ SO ₄ · H ₂ O, wt%	99.8	min
H ₂ O*	16.0	max
Fe ₂ O ₃ , wt%	0.005	max
Na, wt%	0.02	max
Ca, wt%	0.02	max
Ni, wt%	0.02	max
Acid Insolubles, wt%	0.01	max
Alkalinity (as LiOH), wt%	0.1	max

* Value (as weight percent loss) determined by drying at 170°C for 2 hours.

Other Data Bulk density 0.96 g/cm³ (60 lb/ft³)

Physical Properties

Molecular weight	127.94
Density @ 20°C	2.06 g/cm ³
Melting point	Dehydrates between 72°C and 160°C
Standard heat of formation	-414.2 kcal/mole
Water solubility @ 25°C	29.9 wt %

Toxicity/Safety Data White crystals, odorless. This product may be irritating to the eyes.

Additional information on toxicity and safety is contained in the Material Safety Data Sheet (MSDS) available for this product.

Air Treatment Construction Energy Fine Chemicals Glass & Ceramics Greases & Lubricants Polymers Pool Water Treatment

MARKETS SERVED	NORTH AMERICA AND HEADQUARTERS FMC Lithium Seven LakePointe Plaza 2801 Yorkmont Road, Suite 300 Charlotte, NC 28208 P: +1.704.426.5300 F: +1.704.426.5370	EUROPE FMC Chemicals Commercial Road Bromborough Merseyside CH62 3NL, England P: +44.151.482.7356 F: +44.151.482.7361	JAPAN FMC Lithium 9F, Aoyama Building 1-2-3, Kita-Aoyama Minato-ku, Tokyo 107-0061, Japan T: +81.3.3402.3716 F: +81.3.3402.3700	CHINA FMC Lithium 15F Far East International Plaza No. 317 Xianxia Road Shanghai 200051 P. R. China T: +86.21.6235.1919 T: +86.21.6235.1917	INDIA FMC India Private Limited Embassy Star 8, Palace Road High Grounds Bangalore 560052, India T: +91.80.2238.4311 F: +91.80.2238.5255	TAIWAN FMC Lithium 9F-1, 263 Tun Hwa S. Rd. Sec. 1 Taipei, Taiwan T: +866.2.2705.4400 F: +866.2.2702.7460
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Handling/Safety/Disposal Avoid contact with eyes, skin or clothing. Use with adequate ventilation. Wear safety glasses or goggles and rubber gloves. Wash thoroughly after handling. Keep away from strong acids. Keep container closed.

Dispose of waste according to local and Federal laws and regulations.

Shipping Containers 110 pounds (50 kg) of product in a 16.5 gallon (62.5 L) polyethylene-lined fiber drum.

Shipping Limitations Shipments of lithium sulfate require no hazardous shipping labels. Shipments by post, parcel, air, water, rail, or truck are acceptable within each carrier's weight limits and packaging requirements.

For shipments within Europe labeling for supply requirements are:

Xn	Harmful
R&S phrases	see Material Safety Data Sheet

Responsible Care initiative dictates that all shipments of lithium chemicals must be transported in an approved vehicle in a responsible manner (i.e., no flat bed trucks).