

LITHIUM FLUORIDE TECHNICAL GRADE

CAS No. 7789-24-4

QS-PDS-1045 Revision: 00

Application Powerful flux in enamels, glasses and glazes, ingredient in brazing and welding fluxes, molten salt chemistry and metallurgy, and heat sink material.

Appearance White powder

Product Specifications

Guaranteed

LiF, wt%	98.5	min
H ₂ O*	0.50	max
SO ₄ , wt%	0.18	max
Fe ₂ O ₃ , wt%	0.05	max
Alkalinity (as LiOH), wt%	0.5	max
Alkalinity (as Li ₂ CO ₃), wt%	0.8	max
Acidity (as HF), wt%	0.02	max

* Value (as weight percent loss) determined by drying at 110°C for 2 hours.

Other Data	Bulk density	Loose	0.3 g/cm ³ (19 lb/ft ³)
		Tap	0.7 g/cm ³ (38 lb/ft ³)

Physical Properties	Molecular weight	25.94
	Density @ 25°C	2.639 g/cm ³
	Melting Point	848°C
	Boiling Point	1681°C
	Specific heat @ 25°C	0.386 cal/g/°C
	Standard heat of formation	-146.3 kcal/mole
	Standard heat of fusion	6.470 kcal/mole
	Water solubility @ 25°C	0.133 wt %
	Volume increase on melting	29.4%

Toxicity/Safety Data Odorless, white powder. This product may be irritating to the eyes, skin and mucous membranes.

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 F: +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/Storage/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 100 pounds (45.5 kg) of product in a 20 gallon (75.7 L) polyethylene-lined fiber drum.

Shipping Limitations Shipments of lithium fluoride are not classed as hazardous for transport. Shipments by post, parcel, air, water, rail or road 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).