

LITHIUM ORTHOPHOSPHATE TERTIARY

CAS No. 10377-52-3

QS-PDS-1037 Revision: 00

Product Names Lithium Orthophosphine Tertiary, Lithium Phosphate

Formula Li_3PO_4

Application Constituent in low-expansion porcelain enamel glazes and polymer intermediates.

Appearance White Powder

Product Specifications

Guaranteed

$\text{Li}_2\text{O}/\text{P}_2\text{O}_5$ molar ratio	2.95 – 3.05
H_2O^*	6.0 max
Fe_2O_3 , wt%	0.015 max

* Value (as weight percent loss) determined by drying at 770°C for 1 hour.

Other Data	Bulk Density	0.64 g/cm ³ (40 lb/ft ³)
	Particle Size	98% passing U.S. Sieve (425 μm)

Physical Properties	Molecular weight	115.80
	Density @ 17.5°C	2.54 g/cm ³
	Melting point	837°C
	Solubility in water @ 20°C	0.039 wt%
	Heat of Formation @ 25°C	-500.9 kcal/mole

Toxicity/Safety Data White powder. May be extremely irritating to eyes, nose, throat and mucous membranes.

Additional information on toxicity and safety is contained in the Material 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/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 container closed.

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

Shipping Containers 220 pounds (100 kg) of product in a 38 gallon (143.9 L) polyethylene-lined drum.

Shipping Limitations Shipments of lithium orthophosphate require no hazardous shipping labels. Shipments by post, parcel, air, water, rail, or truck are acceptable within 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).

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