

LITHIUM POLYSILICATE

Product Description

LITHIUM POLYSILICATE is an aqueous solution of lithium polysilicate with a SiO₂/Li₂O molar ratio of 4.8.

Product Characteristics

The following specification parameters will be stated in our Certificate of Analysis.

Property	UOM	Value	Test Method
Specific Gravity (25°C/77°F)		1.168 - 1.195	P5900.310.02.EC
Silicon Dioxide (SiO ₂)	% m/m	19.0 - 21.0	P5900.083.01.EC
Ratio SiO ₂ /Li ₂ O		4.6 - 5.0	P5900.083.02.EC
% Transmission	%	50.0 min.	P5900.523.01.EC
Viscosity (25°C)	cPs	20.0 max.	P5900.545.01.EC
Sulfates as Na ₂ SO ₄	% m/m	0.04 max.	P5900.277.01.EC
Total Sodium as Na	% m/m	0.06 max.	P5900.020.01.EC
Chloride as NaCl	% m/m	0.01 max.	P5900.203.01.EC

Typical Properties and Recommended Applications

The following typical properties data are given for informational purposes only, and are not to be interpreted as product or in-process specifications.

Property	UOM	Value
Density	g/cm ³ , lb/gal	1.19, 9.9
Boiling Point (101 kPa)	°C / °F	100 / 212
Melting Point	°C / °F	0 / 32
Vapor Pressure (25°)	mm Hg	17.5
pH		11

LITHIUM POLYSILICATE is an inorganic binder useful in coatings, polymer reinforcement and surface modifications. It is especially useful in high performance zinc coatings for marine and industrial applications in which high pigment loading and water and wear resistance are desired.

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Packaging Information

The standard packaging for LITHIUM POLYSILICATE is:

- 55 gallon drums (Net 530 lb/240.36 kg)
- 275 gallon bulk drums (Net 2535 lb/1149.7 kg)
- Tank truck

Handling & Storage Recommendations

- Although this product can often be thawed to a homogeneous solution after freezing, we recommend that freezing or excessive warm temperature be avoided when possible to avoid precipitation. Store at temperatures above 2°C/35°F and below 43°C/110°F. Bulk storage tanks or drum storage areas should be located in temperature-controlled buildings. Outdoor storage can be used if suitably insulated, heated and protected from the weather. Outside storage should be in a shaded location or a sunscreen should be erected over the tanks or drums.
- Keep the container tightly closed after use. All equipment should be cleaned and sanitized regularly to avoid bacterial contamination.
- Product should be used within 24 months of manufacture.
- Additional information can be found in the Safety Data Sheet (SDS).

Health & Safety Information

LITHIUM POLYSILICATE is a synthetic amorphous Lithium silicate in aqueous form. Additional information can be found in our Safety Data Sheet (SDS). Please refer also to national laws and regulations.

ISO Certification

ISO 9001 Registered

Other Information

The information contained herein is based on our testing and experience and is offered for the user's consideration, investigation and verification. Since operating and use conditions vary and since we do not control such conditions, we must DISCLAIM ANY WARRANTY, EXPRESSED OR IMPLIED, with regard to results to be obtained from the use of this product. Test methods are available on request.

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26 Nov 2015

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