

Li<sub>2</sub>O / SiO<sub>2</sub>**LITHIUM SILICATE (LS)45 HS**

Polysilicate

**PRODUCT**Lithium Silicate, Polysilicate (Li<sub>2</sub>SO/SiO<sub>2</sub>)**DESCRIPTION**

**LITHIUM SILICATE (LS)45 HS** is a high solids aqueous polysilicate solution with a molar ratio of 4.5 (4.2 - 4.8) allows for improved interaction and compounding when used as a reactive binder and/or hardener in coatings, treatments, and sealers. The reactive silicate has a higher concentration of lithium and is preferred to sodium and/or potassium silicates for many applications, including concrete surface treatments, specialty paints and coatings. Especially suitable for high performance zinc coatings for marine and industrial applications in which high pigment loading and water and wear resistance are desired.

For more product information visit  
[www.lithiumsulfate.com](http://www.lithiumsulfate.com)

Appearance	Semi-clear hazy solution
Odour	Odourless
Solids (%wt.)	Solids: 27.0-28.0
	SiO <sub>2</sub> : 24.0-24.50
Ratio SiO <sub>2</sub> /Li <sub>2</sub> O	Li <sub>2</sub> O: 3.0-3.50
Density	1.19 g/cm <sup>3</sup>
Boiling Point (760 mm Hg)	
Melting Point	0 °C
Vapor Pressure @25°C/17.5 mm Hg	17.5 mm Hg
pH	11.0-12.00
Viscosity	14.0-16.0
(Seconds ;ford B4 cup)	33°F / 0 °C
Freeze Point	< than 50 grams per liter
VOC	

## PACKAGING / SHIPPING CONTAINERS

Product is packaged and shipped in 55 gallon polyethylene drums or 275 gallon IBC totes.

## SHIPPING LIMITATIONS

Ground Classification	Not regulated by US DOT
Shipping Name	LITHIUM SILICATE (LS)45; LiTH (LS)45
Technical Shipping Name	None
UNFIC	None
ID Number	None
Packaging Group	None
Labels	No US DOT Labels

*Not regulated by IATA or IMO*

## HANDLING AND STORAGE

Shelf life 1 Year.

Product should be stored at or below 25°C (77°F) in original, unopened containers - stored where temperatures remain above 2° C (35° F).

Drums should be stored in heated buildings. Bulk storage tanks should, if possible, be located in a heated building. Alternately, a shed structure may be constructed to protect the tank and its piping from freezing. Tanks that must be located outside should be provided with external steam coils and lagging. The temperature of the must be kept high enough so that the air in the tank stays above freezing; otherwise, icicles and frost may form above the liquid.

It is necessary to prevent freezing but it's not desirable to store lithium polysilicate for lengthy periods at high temperatures. Continuous exposure to high temperatures will shorten the shelf life. Avoid storing the product in areas where the temperature routinely goes above 43°C (110°F). If storage tanks are located outdoors, choose a shaded location or erect a sunscreen over the tanks to avoid solar energy collection.

Storage tanks constructed of cross-linked polyethylene or fiberglass-reinforced plastic have proved satisfactory. For metal storage tanks, stainless steel type 304 is re- commended. Mild steel tanks with resin lining can also be used.

ORDERS and  
TECHNICAL SUPPORT

Lithium Salts of America  
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## LIMITATIONS

This product is neither tested nor represented as suitable for medical or pharmaceutical uses. Not intended for human injection. Not intended for food use.

## DOCUMENTATION

A Certificate of Analysis and Safety Data Sheet (SDS) in accordance with EN 10204 are supplied with every shipment.

## LIMITED WARRANTY INFORMATION.

### PLEASE READ CAREFULLY.

Lithium Salts of America (a Division of ASG Chemical Holdings, LLC. ASG CHEMIE) believes the information in this document to be accurate as at the date of preparation noted below, but, to the maximum extent permitted by law, Lithium Salts of America accepts no responsibility for any loss or damage caused by any person acting or refraining from action because of this information. The provision of this information should not be construed by anyone as a recommendation to use this product. No one should use any product in violation of any patent or other intellectual proprietary rights or in breach of any statute or regulation. Users should rely on their own knowledge and inquiries and make their own determination as to the applicability of this information in relation to their particular purposes and specific circumstances. Each user should read this SDS and consider the information in the context of how the product will be handled and used in the workplace and in conjunction with other substances or products.

For more information or answers to questions about the use in specific applications, contact your Technical Sales Representative or call Toll Free 1.833.LITHUSA (1-833-548-4872).

Visit our website at [www.lithiumsalts.com](http://www.lithiumsalts.com)