### TECHNICAL DATA SHEET



## Li20 / SiO2 LITHIUM SILICATE (LS)45 HS

Lithium Polysilicate • 28% Solids

#### **PRODUCT**

Lithium Silicate, Polysilicate (Li2SO/SiO2)

#### **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.lithiumsilicate.com

Appearance	Semi-clear hazy solution
Odour	Odourless
Solids (%wt.)	Solids: 27.0-28.0
	SiO2: 24.0-24.50
Ratio SiO2/Li2O	Li2O: 3.0-3.50
Density	1.19 g/cm3
Boiling Point (760 mm Hg)	
Melting Point	0 °C
Vapor Pressure @25°C17.5 mm Hg	17.5 mm Hg
рН	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

ORDERS and **TECHNICAL SUPPORT** 

Lithium Salts of America is Division of ASG Chemie

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#### 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.

# 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.

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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

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