Lith™

# LITHIUM SILICATE (LS)-45

Polysilicate

Chemical Formula: $Li_2O$ / $SiO_2$
CAS Number: 12627-14-4

## PRODUCT DESCRIPTION

Lithium Silicate (LS)-45 is an aqueous lithium polysilicate solution with approximately 23% total solids and a high silicate ratio. It provides reactive binder and hardening properties with low viscosity, making it suitable for coatings, concrete surface treatments, sealers and other inorganic systems.

## KEY FEATURES

- High lithium concentration
- Stable reactive silicate chemistry
- High-ratio, low-viscosity solution
- Improves interaction and compounding
- Enhances water and wear resistance
- Improves hardness, bonding and abrasion resistance
- Supports durability and coating performance

## APPLICATIONS

- Inorganic paints, coatings and primers
- Anti-corrosive coatings
- Protective marine coatings
- Industrial and maintenance coatings
- Clear coats
- Refractories
- Catalysts
- Concrete admixtures
- Concrete surface treatments
- Welding rod binder additives
- Flame retardants
- Ceramics, glazes and enamels

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LIMITED WARRANTY INFORMATION.
PLEASE READ CAREFULLY.

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This document is subject to revision without notice as new data becomes available.

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**PRODUCT SPECIFICATIONS**

| **Appearance** | **Clear, colourless, water-based solution** |
|---|---|
| Specific Gravity @ 25°C | 1.168–1.195 |
| Total Solids | 23% |
| $SiO_2$ | 19.0–21.0 wt% |
| Ratio $SiO_2/Li_2O$ | 4.6–5.0 |
| Transmission | > 50.0% |
| Viscosity @ 25°C | < 20.0 cP |
| Sulfates as $Na_2SO_4$ | < 0.04 wt% |
| Total Sodium as Na | < 0.06 wt% |
| Chloride as NaCl | < 0.01 wt% |
| Density | 1.19 g/cm³ |
| Boiling Point | 100°C |
| Melting Point | 0°C |
| Vapour Pressure @ 25°C | 17.5 mm Hg |
| pH | 11 |
| Flash Point | N/A |
| VOC | < 50 g/L |
| Freeze Point | 0°C |

## PACKAGING
Available in 55-gallon polyethylene drums or 275-gallon IBCs.

## STORAGE & HANDLING
Store in original, unopened containers at or below 25°C and above 2°C. Protect from freezing, prolonged exposure to high temperatures and direct sunlight.

## SHELF LIFE
24 months when stored under the recommended conditions.

## SAFETY
Refer to the current Safety Data Sheet (SDS) for additional information on safe handling, storage and use.