

Li₂O / K₂O / SiO₂**LITHIUM POTASSIUM SILICATE (LPS)39**

Polysilicate

Chemical Formula: Li₂O / K₂O / SiO₂

CAS#. 12627-14-4

PRODUCT DESCRIPTION:

LITHIUM POTASSIUM SILICATE (LPS)39 is an aqueous polysilicate hybrid solution with a molar ratio of 3.9 (ranging 3.8-4.0). The unique composition helps improve interaction and compounding characteristics when formulating coatings, sealers and specialty treatments. The reactive silicate forms a stable, high ratio, low viscosity solution that results in lower levels of water in coatings and can dramatically improve film formation, water resistance, abrasion, hardness and bonding properties for many applications, including concrete surface treatments, specialty paints and coatings. Once dried this material is relatively insoluble compared to potassium and sodium silicates. Especially suitable for high performance zinc coatings for marine and industrial applications in which high pigment loading and water and wear resistance or increased bonding, abrasion and scratch resistance are desired.

APPLICATIONS

Raw material used as a binder and catalyst for:

Inorganic paints, coatings and primers

Anti-corrosive coatings

Powder coatings

Refractories

Catalysts

Concrete admixture

Concrete surface treatments

Welding rod binder additive

Flame retardant

Ceramics, glazes and enamels

Product Specifications**APPEARANCE**

Clear colorless liquid, water-based solution

| Physical Properties | Composition |
|------------------------|----------------|
| Specific gravity@ 25°C | 1.26 - 1.27 |
| Total Solids | 29.00 - 30.12% |

Features

- High lithium concentration
- Improves interaction and compounding
- Offers better, more stable reactions
- Enhances durability and performance

Uses

- Inorganic paint, coatings and primers
Anti-corrosive coatings
- Refractories Catalysts
- Concrete admixture Concrete surface treatments Welding rod binder additive
Flame retardant
- Ceramics, glazes and enamels

Product type

- Silicates

CHEMICAL CONSTITUENTS

| | |
|--------------------------------|---------------------------|
| K2O (% wt.): | 8.0 - 8.50 |
| Li2O (% wt.): | 1.0 - 1.02 |
| SiO2 (% wt.): | 20.0 - 20.60 |
| Weight Ratio: | 2.40 - 2.60 |
| Molar Ratio: | 3.80 - 4.0 |
| pH: | 11.6 - 11.8 |
| Specific Gravity: | 1.26 - 1.27 |
| Density (0Baume (~1260 kg/m3): | 30.00 |
| Viscosity (centipoise): | 33 - 35 |
| Flash Point | N/A |
| VOC | < than 50 grams per liter |
| Freeze Point | 33°F / 0°C |
| Shelf Life | 12 Months |

ORDERS and
TECHNICAL SUPPORT

Lithium Salts of America
is Division of ASG Chemie

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e: info@lithiumsalts.com

PACKAGING / SHIPPING CONTAINERS

Product is packaged and shipped in 55 gallon polyethylene drums, 275 gallon IBC totes or Bulk ISO / Tankers.

Toxicity/Safety Data Handling / Storage / Disposal:

For safety and handling information, consult the product Safety Data Sheet.

Product should be stored in cool, dry conditions away from direct sunlight. Providing the product is kept in the original packaging, the shelf life is 12 months.

Ensure to use PPG during transport/handling and usage. Information on toxicity, safety, handling, storage and disposal is contained in the Safety Data Sheet (SDS) for this product.

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