

Lityofloor LSB OPTIMUM

Construction Chemicals > Floor Coverings > Lithium Silicate-Based



It is a silicate-based liquid surface hardener and densifier consisting of different silicate derivative products designed for application on concrete and cement-based floors. Lityofloor LSB Optimum reacts with free lime in concrete to form calcium silicate hydrate. These insoluble silicates increase the strength and water resistance of the concrete surface. Increased surface hardness reduces dusting and facilitates maintenance, providing a healthier environment. Compared to traditional sodium and potassium silicate hardeners, Lityofloor LSB Optimum is easy and fast to apply.

■ Preparation of Substrate

- Factories
- Storage areas
- Garage floor concrete
- Aircraft hangars
- Shopping malls
- Parking lots
- Micro concrete applications

■ Advantages

- Single component and easy to apply.
- Reduces application time and costs in diamond polishing works.
- Can be applied on old and new concrete surfaces.
- It has high abrasion resistance and its hardness increases over time.
- Penetrates into the concrete and reacts with lime (calcium), prevents the concrete from dusting and causes it to harden.
- It prevents the concrete from dusting and ensures adhesion to the surface.
- As the pores in the concrete are filled, it increases its water impermeability.
- Water repellent.
- It has a clear and bright appearance. Easy to clean.

1 Preparation of Substrate

The surface must be free of dust, oil, paint and other residues that may prevent adhesion. Make sure that the surface is dry before application. A dry surface will help the applied product penetrate deeper into the concrete. The product should be applied to the surface by spraying method and it should be ensured that it is spread on the surface with a short-haired mop from behind without allowing it to dry. During the application, Lityofloor LSB PS should not be allowed to puddle and it should be distributed homogeneously with the mop behind it. Wait 1 day after application to complete the chemical reaction. In case of 2 or 3 coat application, wet-on-wet application should be made without allowing the previous coat to dry.

2 Consumption

0,060 - 0,100 kg/m² (Depending on the surface void condition and concrete quality, the prices may vary)

3 Packaging

10 kg Plastic can
30 kg Plastic can

4 Storage Conditions and Shelf Life

- Unopened packaging lasts for 12 months.
- The product should be protected from direct sunlight during storage and stored at 5-35°C.
- The product should be protected from freezing.
- The container should be tightly closed after use.
- The product should not be mixed with other chemicals.

5 Points to Consider

- Wear protective eyewear, gloves, mask, and clothing before application. Avoid contact with skin and eyes; if contact occurs, wash thoroughly with water and seek medical attention.
- Do not dilute the product with solvent or water.
- Do not use to restore crumbled, weakened concrete.
- Second and third layers can be applied to highly absorbent surfaces. However, these applications should be done wet-on-wet, without allowing the previous layer to dry.
- Desired shine can be achieved immediately with a polishing machine.
- The lithium silicate-based surface hardener is not harmful to health once it has dried.



TECHNICAL DATAS

Binder	Blend Silicate Salt
Color	Transparent
Solver	Water
Odor	Odorless
Density	1,14 Kg/lt
pH	8,0
Full Drying Time	24 hours (24 °C Room temperature)
Solid Matter	18%
Flash Point	N/A
Freezing Point	+5 °C

Safety and Health Warnings

- Protective eyewear, clothing, and gloves should be worn. Avoid contact with skin, eyes, and clothing. Prevent the product from spreading into the environment.
- Do not eat, drink, or smoke during use.
- All packaging and containers should be carefully sealed to minimize spills.
- Containers should be securely sealed when not in use.
- Keep away from heat, sparks, flames, and hot surfaces.
- Broken packages should not be handled without protective equipment. Empty containers should not be reused.
- In the event of contamination of clothing, remove it immediately and wash before reuse.
- The product should be stored in clearly labeled containers.
- Keep out of reach of children. Keep away from food, drink, and animal feed.
- Keep away from oxidizing agents, heat, and flames.
- Only store in the original container.
- Containers should be stored upright, tightly closed, in a cool, well-ventilated area.
- Protect containers from damage.