

Technical Data Sheet TDS-696-01977

# **LSH**<sup>TM</sup>

**Lithium Silicate Hardener for Concrete** 



Building & Transportation



Oil, Gas & ndustrial





Water & Wastewater



## PRODUCT DESCRIPTION

CTech-LLC® LSH<sup>TM</sup> is the premium hardener and sealer for concrete surfaces. CTech-LLC® LSH<sup>TM</sup> is a waterborne, lithium-silicate-based, ready-to-use, colorless liquid penetrates into the concrete surface, a chemical reaction takes place, producing a byproduct that fills in the pores of the concrete. This patented formulation when properly applied, offers substantial improvement in abrasion and chemical resistance and will significantly improve the durability of the concrete surface when compared to untreated concrete.

## **ADVANTAGES**

- Lithium-silicate-based hardener
- Patented formulation penetrates and reacts quickly to produce better initial and ultimate hardness.
- Increased concrete resistance to damage from impact, wear and abrasion
- Breathable and UV stable.
- Cures quickly. Most floors can be opened to traffic within one hour of treatment.
- Won't change look or color of the concrete. Applied with a sprayer.
- May be applied to new or existing cured concrete.

# **TECHNICAL DATA**

	Unit	$LSH^TM$
Consistency		Liquid
Colour	kg/L	Clear
Density	g/cm³	1.1
PH		11
Dry Solid Content	%	12.5
VOC Content	g/L	0
Minimum Penetration	Min.	30
Time		
Drying Time	hours	2-4

# **TYPICAL USES**

CTech-LLC® LSH<sup>TM</sup> is recommended for use wherever hardened, dustproofed, and improved chemical and abrasion resistant surfaces are required. Ideal applications include floors in:

Industrial plants

- Sewage plants
- Large warehouses
- Office buildings
- Hotels & restaurants
- Factories
- Storage silos
- Hospitals
- Sports arenas

#### **INSTALLATION PROCEDURE**

#### PREPARATION OF SUBSTRATE

- Fresh Concrete: On newly placed concrete, CTech-LLC® LSH<sup>TM</sup> can be applied after final finishing.
- Existing (Old) Concrete: Surface should be clean and structurally sound. Remove all residues. curing compounds, oils. sealers, contaminants, and laitance before applying CTech-LLC® LSH<sup>TM</sup>. Fill and repair all holes, cracks. deteriorated areas that have been removed to sound concrete.

## MIXING

CTech-LLC<sup>®</sup> LSH<sup>™</sup> is a ready to use product. For optimum performance, gentle mixing or agitation is recommended.

#### **APPLICATION**

- Fresh Concrete: After final finishing, apply CTech-LLC<sup>®</sup> LSH<sup>TM</sup> using a lowpressure sprayer. Do not allow material to puddle on the surface
- Existing (Old) Concrete: Spray the lithium silicate solution onto the clean surface and then spread it over the surface with a mop to ensure uniform absorption.



## **PACKAGING**

- 5 Gallon (18.93 Liter) Pails
- 55 Gallon (208.20 Liter) Drums

#### **STORAGE & SHELF LIFE**

- Store in original containers at 5°C 40°C.
- It should be protect from freezing.
- Shelf life is 12 months from the date of manufacture in original unopened container.

### **CAUTION**

This product may cause skin irritation. Do not inhale vapors. Provide adequate ventilation. Protect against contact with skin and eyes. Wear rubber gloves, long sleeve shirt, goggles with side shields. In case of contact with eyes, flush repeatedly with water and contact a physician. Areas of skin contact should be promptly washed with soap and water. Do not take internally.

# CTech-LLC®

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#### IMPORTANT NOTE:

Before using any CTech-LLC® product, the user must review the most recent version of the product's technical data sheet, material safety data sheet and other applicable documents, available at www.ctech-llc.com.

#### WARANTY:

CTech-LLC® warrants its products to be free from manufacturing defects. Buyer determines suitability of product for use and assumes all risks. Buyer's sole remedy shall be limited to replacement of product. Any claim for breach of this warranty must be brought within one month of the 'date of purchase. CTech-LLC® shall not be liable for any consequential or special damages of any kind, resulting from any claim or breach of warranty, breach of contract, negligence or any legal theory. The Buyer, by accepting the products described herein, agrees to be responsible for thoroughly testing any application to determine its suitability before utilizing.