

 www.igochem.com	<h1>TECHNICAL INFORMATION</h1> <p>Updated on January 9, 2023</p>	<p>IGOSA Sp. z o. o. NIP 6482806063, KRS 0000924493, Bronisława Hagera Street 41 41-800 Zabrze igochem2020@gmail.com</p>
	<h2>LITOCRYSTAL L</h2> <h3>Lithium silicate-based preparation for surface sealing and hardening of concrete</h3>	

APPLICATION.

Lithocrystal L is a liquid hardener that crystallizes within the concrete structure. It is used to renovate old and refine new concrete surfaces, including surface-hardened and polished ones. Litocrystal L is a lithium silicate-based agent that chemically reacts with concrete components to modify its structure. It can be used for interior and exterior applications.

Main advantages Lithocrystal L is:

- additional hardening and sealing of the concrete surface,
- increased resistance to abrasion, UV radiation, mechanical and chemical damage,
- creating a moisture-resistant (hydrophobization) and dust-free surface,
- easy single-layer application,
- molecular size of lithium particles ensuring deeper penetration and more lasting protection,
- improving the appearance of the floor,
- It is an ideal base for paints and adhesives on concrete walls and ceilings, especially in high-humidity conditions.

HOW TO USE

• Preparation of the surface

Always conduct a test on the chosen surface to ensure the desired result is achieved. Allow the surface to dry before inspecting and selecting the desired application. Any imperfections in the floor should be filled with repair mortar, and any old and dirty concrete should be removed by grinding. The resulting surface should be smooth, uniform, and crack-free.

• Application and drying

On the newly made floors: Litocrystal L should be applied immediately after the concrete toppings have been spread and smoothed. Apply the appropriate amount of Litocrystal L evenly to the prepared surface using low-pressure sprayers, a brush, mop, or paintbrush to ensure even coverage and prevent excess liquid from pooling. Allow the prepared surface to dry for 1-2 hours. Once dry, protect it with foil or a protective agent to prevent the concrete from drying out too quickly. The concrete surface will reach its final parameters after 7 days. After this period, paint can be applied or ceramic tiles can be laid.

On the prepared old substrate: Apply the appropriate amount of Litocrystal L by spraying using a low-pressure sprayer, brush, mop, or paintbrush to ensure even coverage. Spraying should be done using a nozzle that creates a mist while ensuring complete surface coverage. Roll out or spread the excess liquid with a brush, mop, or paintbrush to evenly cover the substrate, ensuring it remains damp for 20-40 minutes. Allow the prepared surface to dry for 1-2 hours. On porous concrete substrates, repeat the process after 24 hours. The concrete surface will reach its final properties after 7 days. After this period, paint can be applied or ceramic tiles can be laid.

The effects of using Litocrystal L are visible after just 24 hours. To achieve a high-gloss finish, the surface can be polished after 12 hours using mechanical polishers with soft pads.

NOTE: Using too much Litocrystal L may lead to discoloration and stains after drying.

TECHNICAL DATA.

Ambient and ground temperature	Above +6°C	
Form of the preparation	Ready to use	
Drying time*	1-2 hours	
Consumption **	Fresh troweled concrete	0.07 – 0.09 kg/1m ²
	Used troweled concrete	0.07 – 0.11 kg/1m ²
	Polished troweled concrete	0.07 – 0.09 kg/1m ²
Efficiency **	Fresh troweled concrete	12 – 16 m ² /1L
	Used troweled concrete	10 – 16 m ² /1L
	Polished troweled concrete	12 – 16 m ² /1L
Penetration depth	2 – 4 mm	
Application method	Apply the undiluted preparation by spraying, using a roller or a bench brush.	

* Drying time of the preparation at a temperature of 23 °C and 50% air humidity.

** Consumption and efficiency depend on quality, class, porosity and surface finish.

PHYSICOCHEMICAL PROPERTIES

Chemical composition	Aqueous dispersion based on lithium silicate
Color	Colorless, slightly opalescent
pH	Approx. 11.0
Density	Approx. 1.1 kg/L
VOC content	Does not contain
Freezing point	0°C
Anti-slip	Does not change after application

PACKAGING.

Plastic bottles and canisters with a capacity of 1 l, 5 l, 10 l, 20 l or other upon agreement with the customer.

STORAGE AND TRANSPORT.

Transport and store in tightly sealed manufacturer's packaging at a temperature between +5°C and +30°C, away from direct sunlight. Shelf life: 24 months from the date of production.

SECURITY.

LITOCRYSTAL L- is a preparation with a high pH that, upon contact with water and other liquids, creates agents that can cause minor burns, irritation, and rashes. Irritant (Xi).

H314 Causes severe skin burns and eye damage.

Contains: potassium methylsiliconate (CAS: 31795-24-1, EC: 250-807-9), lithium hydroxide monohydrate (CAS: 1310-66-3, EC: 215-183-4)

Prevention:

P102 Keep out of reach of children.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response:

The Manufacturer provides the above information and recommendations based on research, trials, and experience. The Manufacturer does not guarantee optimal results if used inconsistently with the recommendations or if storage conditions are beyond the Manufacturer's control. The information contained in this document is based on currently available data characterizing the product and the Manufacturer's knowledge. It should be considered only as an aid to the safe use, transport, and storage of the product. It does not release the user from responsibility for misuse of the above information.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water (or shower).

P310 Immediately call a POISON CENTER or doctor.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Removal:

P501 Dispose of contents/container in accordance with local, regional, national and international regulations.

The product complies with the EN standard: PN-EN 1504-2