

 www.igochem.com	<h1>TECHNICAL INFORMATION</h1> <p>Updated: 09/01/2023</p>	<p>IGOSA Sp. z o. o. NIP 6482806063, KRS 0000924493, Bronisława Hagera Street 41 41-800 Zabrze igochem2020@gmail.com</p>
	<h2>LITOCRYSTAL</h2> <h3>Lithium silicate-based preparation for surface sealing and hardening of concrete</h3>	

APP.

LITOCRYSTAL –It is a liquid hardener that crystallizes within the structure of hardened concrete. It is used to renovate old and improve the quality of new concrete floors, including hardened and polished ones. Litocrystal is a lithium silicate-based product that chemically reacts with concrete components, changing its structure. It can be used indoors and outdoors.

The main advantages of Litocrystal are:

- additional reinforcement and compaction of concrete floors;
- increasing the stiffness of the floor;
- increased resistance to abrasion, UV radiation, mechanical and chemical damage;
- prevents water from penetrating concrete or other cementitious substrates exposed to continuous water exposure;
- prevents the appearance of lime stains on the concrete surface;
- increased resistance to petroleum products, chemical road salts, etc.;
- simple single-layer application;
- Lithium particle size provides deeper penetration and longer protection;
- improving the appearance of the floor,
- it is an ideal base for paints and adhesives on concrete floors, walls and ceilings, especially in high humidity conditions.

NOTE! Petroleum stains should be treated with DOMOCLEAN emulsifier within 8 hours. Then, wash the entire surface with CERAMOCLEAN PRO and rinse with a jet of water from a Carcher cleaner.

HOW TO USE:

- **Preparation of the base:**

Always test the chosen surface to ensure you achieve the desired results. Allow the surface to dry before testing and selecting the appropriate application. Fill any gaps in the floor with repair mortar, and sand away any old, dirty concrete. The resulting surface must be smooth, uniform, and crack-free.

- **Application and drying:**

For new surface: **LITOCRYSTAL** It should be applied immediately after the concrete surface has hardened and polished. Apply the required amount of Litocrystal evenly to the prepared surface using a low-pressure sprayer, mop, brush, or broom to ensure even coverage. Spray using a nozzle that creates a fine mist while ensuring complete surface coverage. Ensure there are no excess liquid puddles. If any puddles appear, spread them evenly with a brush or mop. Allow the prepared surface to dry for 1-2 hours.

Once dry, protect the concrete with foil or a protective agent to prevent it from drying too quickly.

The floor will reach its final performance after 7 days. After this period, paint can be applied or ceramic tiles can be laid. The effects of **LITOCRYSTAL** application are visible after 24 hours. To achieve a high-gloss finish, the surface can be polished after 12 hours with a mechanical polishing machine and soft pads.

The above information and recommendations are provided by the Manufacturer based on research, testing, and experience. The Manufacturer does not guarantee that optimal results will be achieved if the product is used contrary to the recommendations or stored under conditions beyond the Manufacturer's control. The information contained in this document is based on currently available product data and the Manufacturer's knowledge. It should be considered solely as an aid in the safe use, transport, and storage of the product. It does not release the user from liability for any unauthorized use of this information.

On the old surface: The layer of old, dirty concrete must be removed by grinding.

If grease or oil stains remain on the surface, use DOMOCLEAN emulsifier. Then, wash the entire surface with CERAMOCLEAN PRO and rinse with a jet of water from a Carcher sprayer. Once the moisture has dried, apply an appropriate amount of LITOCRYSTAL using a low-pressure sprayer, brush, mop, or broom to ensure even coverage. Spray using a mist nozzle that creates a fine mist while ensuring complete coverage. Using a brush, mop, or broom, spread the excess liquid evenly over the surface and keep it wet for 20-40 minutes. Allow the prepared surface to dry for 1-2 hours. For porous concrete surfaces, repeat the treatment after 24 hours. The floor will reach its final performance after 7 days. After this period, paint can be applied or ceramic tiles can be laid. The effects of LITOCRYSTAL are visible after 24 hours. To obtain a shine, the surface can be polished after 12 hours with a mechanical polishing machine with soft pads.

NOTE: Using too much LITOCRYSTAL may cause discoloration and staining after drying. Additional protective coatings or plasters can be applied for 7 days after processing. Additional penetration is pointless, as the surface will not absorb any agent. Petroleum-based products are not recommended.

TECHNICAL DATA.

Ambient temperature and base	Above +6°C
Condition of the preparation	Ready to use
Drying time*	1 – 2 hours
Consumption **	Fresh concrete 0.07 – 0.09 kg/1m2 Polished concrete 0.07 – 0.11 kg/1m2 Polished concrete 0.07 – 0.09 kg/1m2
Efficiency **	Fresh concrete 12 – 16 m2/1L Used concrete 10 – 16 m2/1L Polished concrete 12 – 16 m2/1L
Penetration depth	6-8 mm
Application method	Apply the product undiluted by spray, roller or brush.

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

** Consumption and efficiency depend on quality, grade, porosity and surface treatment.

PHYSICAL AND CHEMICAL PROPERTIES.

Chemical composition	Lithium silicate based aqueous dispersion
Color	Colorless, slightly opalescent
pH	OK 13.0
Density	Approx. 1.1 kg/l
Volatile organic compound (VOC) content	Does not contain
Freezing point	0°C
Anti-slip protection	Does not change after application

PACKAGING.

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

STORAGE AND TRANSPORT.

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Store and transport in the manufacturer's tightly closed packaging, at a temperature between +5°C and +30°C, away from light. The shelf life is 24 months from the date of production.

SECURITY.

LITOCRYSTAL- 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:

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

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