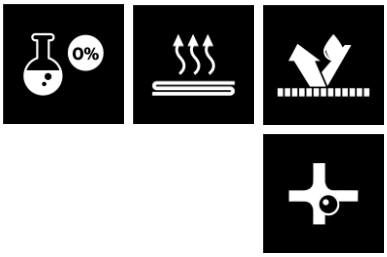
LITHIUM IMPREGNATION LI 12



> surface protective
> water-repellent
> open to vapour diffusion
> does not prime the substrate
> surface hardening

Product description

Ready-to-use, matt, single-component, transparent, solvent-free impregnation agent with extremely good alkali resistance based on lithium-silicate. The hardened surface protection is open to vapour diffusion and UV-stable. Depending on optical requirements, the surface can be shaped by subsequent impregnation with (concrete impregnation NE 24) or without (concrete impregnation TE 18) wet effect.
Indoors and outdoors for impregnating and increasing the surface strength of mineral surfaces, such as concrete, cement screed, mortar slump-flow, etc.

Delivery format

Container	Outer packaging	Pallet
5 KG / KKA	-	96 KKA

Storage
Can be stored frost-free, cool, and dry on wooden shelves in the unopened original container for 365 days

Processing

Recommended tools
Airless sprayer, sprayer (solvent-resistant design).
Processing
Impregnation is best applied mechanically using a sprayer. Smaller areas can also be processed with a brush or roller. Multiple treatment processes are necessary for highly absorbent substrates.

Murexin GmbH: A-2700 Wiener Neustadt, Franz von Furtenbach Straße 1
Tel.: +43(0)2622 / 27 401 - 0, Fax: +43(0)2622 / 27 401 DW 187
E-Mail: info@murexin.com, www.murexin.com

Technical data

Chemical base	Lithium-silicate
Density	approx. 1.1 g/cm³
Solid content	approx. 15 %
Consumption	0.05 - 0.1 g/m² depending on the absorbency of the substrate
Can be walked on	after approx. 12 hrs
Volatile matter	approx. 85 %
Penetration depth	approx. 10 mm, depending on the substrate
Drying speed	approx. 10 - 30 min

Substrate

Suitable substrates

Suitable substrates:

Requirements for mineral substrates: the substrate must be dry, stable, and free of separating, intrinsic, and dissimilar substances, pursuant to the IBF Guideline "Industrial floors made of reactive resin". Residual moisture max. 4 % by weight, measured with the CM device. Substrate temperature greater than 12 °C and 3 K above dew point; adhesive tensile strength on average 1.5 N/mm²; adhesive tensile strength smallest single value 1.1 N/mm²

Substrate pre-treatment: Not suitable for permanently rising or pressing humidity. The substrate must be pre-treated by suitable mechanical process. The penetration depth is deeper the more porous the substrate is. Ensure that adjacent areas which are not to be impregnated are covered well. Protect window areas, wood, plants, etc. from spraying.

Product and processing instructions

Material instructions:
- The material properties may change significantly when working outside the ideal temperature and/or humidity range.
- Bring materials up to temperature accordingly before processing!
- To retain the product properties, no foreign materials may be mixed in!
- Water dosing amounts or dilution specifications must be precisely kept!
- Check coloured products before use for colour consistency!
- Colour evenness can only be guaranteed within a batch.
- Environmental conditions significantly influence colouring.
- Carefully open the container and stir the product well!
- A scale must be used for mixing partial amounts!
- Process reaction resins as quickly as possible after mixing.
- Water-based systems have a limited shelf life after dilution with water; therefore, we recommend the quickest possible processing.
- Always allow primers to dry well/cure.
- Odour formation of solvent-based systems must be observed.
- At a constant temperature of + 20 °C, applied impregnations are mechanically resistant after 3 days and chemically resistant after 7 days.
- UV exposure and exposure to certain chemicals can cause discolouration or yellowing on the surface, but this does not impair the functionality or suitability for use of the coating.

Environmental information:
- Do not process at temperatures below + 5 °C!
- The ideal temperature range for material, substrate, and air is +15 °C to +25 °C.
- The ideal relative air humidity range is between 40% to 60%.
- Increased humidity and/or lower temperatures delay and lower air humidity and/or higher temperatures accelerate drying, setting, and hardening.
- Ensure sufficient ventilation during the drying, reaction, and hardening phase; avoid draughts!

Murexin GmbH: A-2700 Wiener Neustadt, Franz von Furtenbach Straße 1
Tel.: +43(0)2622 / 27 401 - 0, Fax: +43(0)2622 / 27 401 DW 187
E-Mail: info@murexin.com, www.murexin.com

- Protect from direct sunlight, wind, and weather!
- Protect adjacent components!
- The substrate temperature must be at least 3 K above the dew point (the prevailing relative humidity and the air temperature can be used to determine the respective dew point temperature by means of a dew point table).
- During the reaction phase protect against impurities (dust, insects, leaves, etc.)!

Tips:
- We recommend using a test surface first or a small area for initial, small-scale testing.
- Observe the product data sheets of all MUREXIN products used in the system.
- Keep a genuine original container of the respective batch for later repair work.
- To avoid projections and visible transitions of several working paths, these must be processed offset for longer lengths!
- Abrasive, scratching mechanical loads lead to wear marks.
- Plasticisers from car tyres can lead to discolouration.

The information provided reflects average values obtained under laboratory conditions. Due to the use of natural raw materials, the indicated values of individual deliveries may vary slightly without impacting the product suitability.

Safety instructions

Please refer to the safety data sheet for product-specific information with regard to composition, handling, cleaning, corresponding actions, and disposal.

Limiting and monitoring exposure
Personal protective equipment:
General protection and hygiene measures:
- Observe the usual precautionary measures when dealing with chemicals.
- Keep away from foodstuffs, beverages, and feedstuffs.
- Take dirty, soaked clothing off immediately.
- Wash your hands before breaks and after finishing work.
- Do not inhale gases/vapours/aerosols.
- Avoid contact with the eyes and skin.

Breathing protection: not required with good room ventilation.
Hand protection: protective gloves.
Glove material
- Butyl rubber
- Nitrile rubber

Penetration time of the glove material
- The precise penetration time is to be found out from the protective glove manufacturer and complied with.

Eye protection: Tightly-sealing goggles.
Body protection: occupational protective clothing.

This leaflet is based on extensive experience, is intended to convey the best of our knowledge, is not legally binding and does neither constitute a contractual legal relationship nor a subsidiary obligation resulting from the bill of sale. The quality of our materials is guaranteed within the framework of our general terms and conditions. Our products may be used by professionals and/or experienced and accordingly technically skilled persons only. Users are not released from inquiring in case of uncertainties or from rendering professional workmanship. We recommend using a test surface first or a small area for initial, small-scale testing. Naturally, it is not possible to describe or foresee all possible current and future uses and peculiarities. Information that is assumed to be familiar to experts has been omitted.
Please observe the current, technical, national and European standards, guidelines and data sheets regarding materials, substrates and the subsequent construction. Please contact us if you have any reservations or doubt.
This version is rendered invalid if a new version is released. The most recent data sheets, safety data sheets and the terms and conditions are available online at www.murexin.com.

Murexin GmbH: A-2700 Wiener Neustadt, Franz von Furtenbach Straße 1
Tel.: +43(0)2622 / 27 401 - 0, Fax: +43(0)2622 / 27 401 DW 187
E-Mail: info@murexin.com, www.murexin.com