

LithiShield™ Lithium-Based Penetrating Surface Hardener

1. PRODUCT OVERVIEW

LithiShield is a lithium-based penetrating liquid surface hardener. It can penetrate into the internal pores of concrete and react with free calcium ions to produce insoluble and hard calcium silicate gel. This blocks capillary pores, makes the concrete hard and dense, and greatly improves the strength and wear resistance of the concrete surface.

2. BASIC INFORMATION

Item	Details
Product Type	Lithium-based Penetrating Liquid Sealant and Hardener
Model Specification	S12
Sample State	Homogeneous liquid
Judgment Basis	JC/T 2158-2021 Penetrating Liquid Hardener

3. CORE TECHNICAL INDICATORS

No.	TestItem	StandardRequirement	TestResult	Individual Conclusion
1	Appearance	Transparent,homogeneousliquid	Transparent, homogeneousliquid	Compliant
2	pHValue	≥10.0	11.5	Compliant
3	WearResistance(AR2)	≤0.20mm	0.07mm	Compliant
4	SurfaceHardness	≤4.5mm	4.3mm	Compliant
5	24hSurfaceWaterAbsorption	≤5.0mm	3.5mm	Compliant
6	(VOC)Content	≤20g/L	Notdetected (VOC<2g/L)	Compliant
7	SolidContent	Indicatedvalue±2%	45%	-

4. PRODUCT CHARACTERISTICS

- This product is a colorless and transparent liquid. Concrete is hard and dense after use. It will not affect the original appearance of concrete (including color).
- Simple construction, no need to dilute, use immediately. This product is non-flammable and can penetrate into the ground and harden without affecting the ventilation of the concrete itself. It has no impact on the environmental ecology. Non-toxic, odorless, non-burning, non-explosive, pollution-free, and no harm to the human body.
- After the concrete surface is treated with LithiShield, it can effectively prevent dusting and sand, prevent oil and dirt from penetrating into the concrete, and can reduce the maintenance cost of the concrete floor. It can be used in conjunction with the curing agent.
- After the concrete surface is treated with LithiShield, a dense solid whole is formed, so that the surface has good permeability resistance. It will not peel off, wear and age, and the effect is long-lasting.

5. APPLICATION SCOPE

LithiShield is suitable for concrete floors, old and new concrete floors, sanded floors, and terrazzo floors. It can also be used for concrete anti-seepage projects. It has strong permeability and can quickly penetrate deep into concrete capillaries, block pore channels, and has a sealing effect. It can solve the problems of concrete dusting and sand at the root. This product can greatly improve the strength and wear resistance of the concrete surface.

6. STORAGE AND TRANSPORTATION

- Store in a cool and ventilated place, away from light, moisture-proof and sealed, and prevent freezing.
- This product is non-toxic, non-flammable, and can be transported as general goods.

7. PRECAUTIONS

- Before construction, please clean the base surface without dust, grease, cement residue, etc.
- During construction, if the base surface is too smooth, it should be polished and roughened before construction.
- If the hardener is applied to a worn floor, it is necessary to polish the worn floor first and then apply it.



LevelCore 10-Year System Warranty

Summary of Accredited Installer and warranty compliance requirements.

Warranty eligibility (all conditions must be met)

- **Installed by a LevelCore Accredited Installer.**
- **Installation is recorded** with all required QA documentation.
- Substrate preparation, ambient conditions, mixing, and application follow the relevant TDS **strictly**.
- **Full LevelCore system used from substrate preparation onwards.** Mixing brands or using non-LevelCore primers, waterproofing, levellers, hardeners, sealers or accessories voids warranty.

Quality assurance record keeping (required on every project)

- Site address and client name
- Installer accreditation number
- Batch number(s) of LevelCore product(s) used
- Pre-install photos showing substrate condition
- Ambient conditions (temperature and humidity)
- Mixing ratio and application thickness
- In-progress photos at each stage
- Post-installation photos within 48 hours
- Client sign-off (required for installations ≥ 99 m²)

Submission timeline

All QA forms and media must be submitted within **5 working days** of installation via the LevelCore Portal or by email to warranty@levelcore.com.au.

Warranty voiding events

- Use of unapproved installers (non-accredited)
- Improper surface preparation
- Non-compliance with recommended curing times or mix ratios
- Use of non-LevelCore products within the specified system from the substrate up
- Failure to record and submit the required QA documentation

Accredited Installer program (overview)

- Complete LevelCore Installation Training (online + onsite practical)
- Understand the specific product Technical Data Sheets (TDS)
- Submit relevant qualifications and insurances
- Agree to the LevelCore Installer Code of Conduct
- Complete a minimum of 2 supervised installations
- Receive an accreditation certificate valid for 12 months (renewal requires project summaries and refresher modules)

Support and contacts

Warranty: warranty@levelcore.com.au | **Phone:** 1800 717 398

Website: www.levelcore.com.au

This summary forms part of the Warranty Terms & Conditions and is binding on all Accredited Installers.