

# Litosil – hardener for concrete and building materials.

**Litosil** is ecological additive preservation for concrete and concrete floors on lithium silicate base which transforms clear concrete surfaces into the hard, waterproof, and permanently dust-free floors with the option of adjustments into high polish which increases in time. It can be applied at schools, stores, hospitals, sporting and industrial halls, etc. It includes clear or mild cloudy low viscosity liquid.

**Application:** Considering the low viscosity, **Litosil** can be applied with a brush or mechanical spray. The treated surface must be cleaned prior to the application from dust – ideally vacuumed with industrial vacuum cleaner. The concrete surface must be dry, without grease. Use at temperatures above 5°C.

## Litosil series:

	Litosil 39/12	Litosil 39/18	Litosil 39/24	Litosil MR	Litosil LP 46	Litosil BET
pH	min. 10	min. 10	min. 10	min. 7	min. 10	min. 10
Content of active substances % Min.	min. 12,00	min. 17,00	min. 23,00	-	46,50 – 47,50	11,70 – 13,20
Density g.cm <sup>-3</sup> min.	min.1050	min. 1120	min. 1190	min. 1000	1545 – 1555	1080 - 1120
Viscosity mPa.s min.	min. 3	min. 10	min. 15	-	-	-

Litosil 39/12 – for concrete of the highest quality with minimum porosity

Litosil 39/18 – for concrete of standard quality

Litosil 39/24 – for concrete of low quality and old with high porosity

Litosil LP 46 – Litosil with increased resistance to water, oils, some acids, and hydroxides (lye)

Litosil MR - gloss and water resistance

Litosil BET – protection and hardening for strained outdoor concrete areas (airports, parking lots, etc.)

**Consumption:** 0,05 – 0,5 L/m<sup>2</sup> as per the surface quality and porosity. **Litosil** must be applied in such way to prevent the soaking of locations (puddles) which cannot be absorbed. **Litosil** can be (except for LP 46, MR and BET) applied in more layers. The time clearance between individual applications should be at least min. 6 hours. **Litosil** can be diluted with distilled water without any limits but dilution reduces its effectiveness. When using **Litosil LP 46** and **Litosil MR** it is necessary to penetrate the surface of Litosil 39/12.

**Hardening period:** Litosil achieves final solidity and effect according to the concrete type and ambient temperature in 24 – 28 hours after application. Two hours after application it is possible to walk on the surface.

***Advantages of Litosil series:***

- *It increases the resistance to abrasion which extends the service life and integrity of the floor.*
- *Viscosity and density are very similar to water and therefore it penetrates deep in the micro pores.*
- *It provides deeper penetration and more permanent protection.*
- *It does not absorb water and does not cause the floor sweating.*
- *It chemically reacts with concrete and forms insoluble silicate*
- *It reduces dust dispersion*
- *It can be placed on new and old concretes.*
- *It does not contain sodium or potassium salts which contribute to the occurrence of the cracks.*
- *It includes a product on water base, it does not contain any solvents, odour free. Extremely low VOC content.*
- *It is a great prime and it is compatible with most flexible adhesives.*
- *It prevents the lime scum and whitewash.*

***Package:***

- plastic barrels 50 and 200 l
- IBC containers 1 000 L
- tankers 24 t

***Transport and storage:*** Litosil can be stored and transported at temperatures exceeding + 5°C in closed packages.

***Occupational health and safety:*** Based on the 1272/2008 ES regulation, Litosil is not classified as dangerous substance. During work, use protection gloves, face shield, rubber clothing, rubber apron, and footwear as a prevention.

**CAS No.:** 12627-14-4

**Protection and work safety:** SAFETY DATA SHEET

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