



## COUPSYL® LS-HARDENER

### Technical Information

COUPSYL® LS-HARDENER as a liquid lithium-based concrete hardener is a colorless, transparent and full mineral solution. This product with its high penetration into the concrete and cement texture while reacting with calcium and magnesium salts has blocked the pores and capillary tubes. It does not allow water or steam particles, oil and even harmful gases to penetrate. Also, it actually removes efflorescence from cement and concrete surfaces by absorbing calcium and calcareous compounds. In other words, this product with its high penetration strength increases the texture density of these surfaces. Therefore, concrete surfaces that have been reinforced with lithium-based silicate penetrant hardeners increase their abrasion resistance and also their permeability is greatly reduced while losing their adsorption and penetration centers.

### 1. Uses and applications

- Glazing old and new concrete surfaces (glossy, anti-wear and impermeable)
- Making concrete floors hygienic
- Water repellent concrete water tanks and elevator shafts
- Water repellent of building facades, cement cladding of bricks and tiles – ceramics
- Anti- efflorescence and waterproofing primer before concreting and repairing concrete
- Increasing abrasion resistance and dust repellent of old concrete surfaces
- Increasing the hardness of concrete surfaces and floors
- Polishing and dust proofing concrete floors
- Prevents the growth of fungus, moss and lichen on the surface



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### 2. Features and benefits

- Being Lithium-based and high penetration power
- Fully absorbent and penetration power up to 5-10 mm in concrete
- Permanent durability and stability
- Improve the abrasion resistance of concrete surfaces
- Being water-based and with petroleum solvents (environmentally friendly)
- Nonflammable
- Heat resistant to temperature up to 400 ° C
- Absorption of free lime and efflorescence control strength
- Ability to filling pores and capillaries and microscopic concrete, stone and brick ducts
- Ability to increase the concrete density
- Restoring old concrete surfaces and further strengthening
- Water repellent concrete
- Prevent negative water pressure
- No participate in an Alkali-silica reaction of concrete

### 3. Technical Specifications

Property	Amount
Physical appearance	Clear liquid
Purity	≥ 99
pH	13-14
Solid percentage	13 ± 0.5 wt. %



#### **4. Method and tools:**

This product can be applied to the surface with a low-pressure pump (spraying pump) or a brush without the need for dilution. But depending on what concrete surface (concrete, stone, and brick) is applied and also what application it has, performing method can be a little different. (For more information, refer to this product manual file.)

#### **5. Risks and Limitations:**

To apply liquid hardener on concrete surfaces, it must have passed at least 7 days since the concrete was applied and the concrete has reached its final strength. Due to its low resistance to acidic conditions, it cannot be used as a final coating where acid washing is required.

#### **6. Maintenance method**

Keep in a sealed container, dry and low light environment at a temperature of 15-40 degrees Celsius. In case of contact with skin, wash immediately with plenty of water. Immediately see a doctor if swallowed. This solution is free of hazardous evaporative and non-flammable materials.

#### **Tips:**

1. It is emphasized here this information is based on our current knowledge and is not necessarily the best suggestions, therefore the customer should take action to use materials after performing the necessary tests and examining all the effective factors in the workplace.



Couple Shimi Sepahan Co.

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