

**Capillary and Water Repellent Material for Absorbent Surfaces****Potassium Methyl Silicate and Siloxane-Based****Product Technical Data Sheet****Issue Date: 11.06.2017****DEFINITION**

COSIL 3 is a water-based, potassium methyl silicate and siloxane-based, solvent-free, single-component, low-viscosity, transparent, ready-to-use surface and capillary protection material.

**APPLICATION AREAS**

- On absorbent natural stone surfaces like limestone (on exterior facades of masonry buildings)
- On brick and tile surfaces (on exterior facades of masonry buildings) On ceramic and sandstone surfaces
- On aerated concrete and foam concrete
- As a moisture barrier on concrete
- On mineral plasters
- As a water repellent on porous natural stone surfaces

**ADVANTAGES**

- Single component, easy to apply
- Does not change the colour or appearance of surfaces
- Breathable, allows water vapour transmission
- Does not form a film layer on the surface.
- Prevents water penetration into surfaces, forming a barrier against the harmful effects of water-soluble salts like chlorides
- Shows excellent penetration performance

**TECHNICAL PROPERTIES**

- **Material Composition:** Water-based, potassium methyl silicate and siloxane-based, solvent-free
- **Colour:** Transparent, does not change the base appearance
- **Density:**  $1.00 \pm 0.01 \text{ g/cm}^3$
- **pH:** 10–11
- **Flash Point:** -
- **Drying Time:** Water resistance after 4 hours
- **Packaging:** Available in 10-litre drums

**APPLICATION PROCEDURE****Surface Preparation:**

Surfaces to be treated must be dry. Damaged or loose parts, oils, paint, lime, mold, moss, curing compounds, efflorescence, asphalt, and other residues or coatings that may prevent the water repellent from penetrating the material must be cleaned. Surfaces can be cleaned using environmentally friendly methods, such as microsandblasting or low-pressure water cleaning. The protective patina layer on the stone surface must not be damaged during cleaning. If there is insufficient information about previously used chemicals on the surface, a test should be performed before application to assess the performance of the material.

**Application Method:**

COSIL 3 is a single-component, ready-to-use material. After proper surface preparation, it should be applied to mineral surfaces by spraying with an airless sprayer. The pressure of the sprayer should be low and a suitable nozzle should be used. Care must be taken to avoid atomization of COSIL 3 during spraying, and brushes should not be used. Sufficient material should be sprayed to create a visibly wet texture on the surface. For highly absorbent surfaces, a second coat should be applied before the first coat dries.

**CONSUMPTION**

Depends on surface absorbency: 200–600

**IMPORTANT CONSIDERATION**

- COSIL 3 should not be used on non-absorbent surfaces like glass, wood, plastic, or metal
- The application must be done with appropriate spraying equipment; avoid atomization and do not use brushes.
- Ambient and surface temperatures during application should not be below +5°C or above +30°C
- After exposure to heavy rain or water jet cleaning, surfaces should dry for 24–72 hours before application.
- Material should not be applied if rain is expected within 4 hours

## PACKAGING

10 kg drums.

## SHELF LIFE

12 months from the production date under proper storage conditions. Opened containers should be resealed and used within the shelf life if stored correctly.

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- COSIL 3 is supplied in ready-to-use packaging. Do not add solvents, water, or other diluents.

## TOOL CLEANING

Tools and equipment should be cleaned with thinner after application.

## SAFETY RECOMMENDATIONS

During application, appropriate workwear, protective gloves, goggles, and masks should be used in accordance with occupational health and safety rules. Due to the irritating effects of uncured material, components should not come into contact with skin or eyes. In case of contact, wash immediately with plenty of water and soap. If ingested, seek medical attention immediately.

No food or beverages should be brought into the application areas.

Keep out of reach of children.