

## Technical Data Sheet

# Protectosil® 800

### Water repellent impregnation for concrete and other mineral substrates

## PRODUCT DESCRIPTION

Protectosil® 800 is a free-flowing, colorless, solvent-free liquid based on a monomeric alkylalkoxysilane. It is specifically intended for the water-repellent impregnation of mineral construction materials in outdoor areas.

### Typical Properties

Property	Unit	Value
<b>Appearance</b>		colorless liquid
<b>Active Content</b>	%	~100
<b>Boiling Point, min.</b> DIN 51751 (1.013 hPa)	°C	265
<b>Density</b> DIN 51757 (@20 °C)	g/cm <sup>3</sup>	0.88
<b>Flash Point, min.</b> DIN EN ISO 2719	°C	100
<b>Viscosity</b> DIN 53015	mPa·s	2

The data represents typical values (no product specification)

## TYPICAL APPLICATIONS

Protectosil® 800 is suited for waterproofing of mineral substrates such as:

- concrete (road bridges, port installations and all marine concrete structures, concrete facades, exposed aggregate concrete)
- clinker masonry

## BENEFITS & ADVANTAGES

Main advantages of Protectosil® 800

- significant reduction of water uptake
- very good resistance to chloride ion ingress
- high resistance to alkaline environments
- deep penetration into dense substrates
- preservation of water vapor permeability
- no change of surface appearance
- enhanced durability

## DOSAGE

Protectosil® 800 is to be used undiluted. The amount to be applied depends to a large extent on how absorbent the substrate is. Exact amounts should be evaluated on a small test patch first.

In the case of concrete at least 150 g/m<sup>2</sup> should be applied.

## HANDLING & PROCESSING

Concrete must be allowed to cure for a minimum of 28 days. Concrete repair and replacement must be completed prior to application of Protectosil® 800. Patching materials, caulking, sealing materials and traffic paint must be fully cured before applying Protectosil® 800. All surfaces should be air-dry and clean in order to ensure deep penetration of the active ingredient.

Cleaning is required to remove dirt, dust, efflorescence, mold, salt, grease, oil, asphalt, laitance, curing compounds, paint, coatings as well as other foreign materials. Acceptable surface cleaning methods include shotblasting, sand-blasting, water blasting and using chemical cleaners.

During application the outside temperature and the temperature of the substrate should be within the range of 0 °C to 40 °C. Protectosil® 800 should not come into contact with water before or during application and should not be applied if there is strong wind or if it is raining.

Protectosil® 800 must be applied by flow coating to the saturation point. This is achieved by allowing it to flow without pressure against the surface to be treated. All delivery devices for liquids are suitable (e.g. airless spray guns). The material must not be atomized or applied with a brush. A liquid film of Protectosil® 800 must remain in contact with the substrate for several seconds. Horizontal surfaces should have a shiny, wet appearance for 3 - 5 seconds. Vertical surfaces should exhibit a 30 - 50 cm shiny curtain of liquid. All equipment and containers must be clean and dry. After use they can be cleaned with any organic solvent (methylated spirit, petrol or thinners).

As possible previous treatments of the substrate might be unknown, it is always recommended to carry out a test on a small test patch first to make sure that no undesired side effects appear.

Non-absorbent substrates such as e.g. glass, wood, plastic and metal cannot be treated with Protectosil® 800. Glass, wood and metal are not attacked by Protectosil® 800. Neither are most plastics used in construction. Therefore covering is normally not necessary. To make it sure we recommend to carry out a test. In the worst case, product not absorbed by the substrate may react with atmospheric moisture to form a greasy, glossy silicone resin film, which can easily be removed if cleaned immediately using conventional cleaning agents, or alcohol. Plants in the vicinity of the substrate to be treated should be protected against contact with Protectosil® 800.

## SAFETY

Before considering the use of Protectosil® products please read its Safety Data Sheet (SDS) thoroughly for safety and toxicological data as well as for information on proper transportation, storage and use. The Safety Data Sheet is available on our website <https://silanes.evonik.com/en> or upon request from your local representative, customer service or from Evonik Operations GmbH, Product Safety Department, E-MAIL [sds-hu@evonik.com](mailto:sds-hu@evonik.com).

## PACKAGING

Protectosil® 800 is supplied in 25 kg pails, 175 kg drums and 870 kg IBC's.

## Registration Listings

Registry	Status
Australia (AIC)	Yes
Canada (DSL)	Yes
China (IECSC)	Yes
European Union (EINECS/ELINCS)	Yes
Japan (ENCS)	Yes
South Korea (KECL)	Yes
Philippines (PICCS)	Yes
United States of America (TSCA)	Yes

## STORAGE

The product should be stored at temperatures between -10 °C and 40 °C.

## SHELF LIFE

Protectosil® 800 has a shelf life of at least 12 months if stored in originally sealed containers.

For further information  
visit our  
Customer Portal



World of Protectosil®

### Disclaimer

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