

PRODUCT DESCRIPTION

PlekoGuard EPU is a two-component, low-solvent, non-toxic epoxy polyurethane coating system, designed for excellent chemical resistance.

It can be applied as a body coat, finish coat, or sealer over polyurethane and other epoxy-based protective coatings. The UV stability provided by its polyurethane component makes PlekoGuard EPU ideal for use in exposed environments such as rooftops and open car parks.

PlekoGuard EPU is supplied in standard grey, with other colors available upon request.

Its non-sagging formulation allows for easy application on both vertical and horizontal surfaces.

USES

PlekoGuard EPU is suitable for a wide range of protective applications, including:

- Sealing layers for polyurethane and epoxy coating systems.
- Protective coating for marine structures, oilfields, tunnels, parking areas, reservoirs, tanks, and pipelines.
- Internal lining of chemical storage tanks and petroleum product containers.
- Lining for drinking water structures and wastewater facilities, including storage tanks, aeration basins, and piping systems.

APPROVED SUBSTRATES

PlekoGuard EPU can be applied over concrete and Steel substrates.

PACKAGING

6 & 20 Kg Sets.

COVERAGE

The PlekoGuard EPU coverage is approximately 7 m² /kg/80-micron dry film thickness. The manufacturer does not warrant square meter coverage, which can vary greatly according to application techniques and substrate conditions.

PROPERTIES

- **High bonding strength to concrete and steel**
- **UV stable and resistant to weathering**
- **Waterproof and resistant to a wide range of industrial chemicals and fuels**
- **Non-toxic, hygienic, and resistant to bacterial and fungal growth**
- **Does not require a primer for application**
- **Available in grey, with other colors upon request**
- **Long pot life, ideal for hot climates**
- **Suitable for both vertical and horizontal applications**

TECHNICAL DATA

Property	Method	Value
Color		Grey/other colors
Solid Content (by weight)		67 ± 1%
Mixed Density @25°C	ASTM D1475	1.2± 0.02 Kg/ltr
Touch Dry @25°C	ASTM D2471	8hrs.
Pot Life @25 °C	ASTM D2471	150 ±10 min.
Overcoat time @25 °C		16-36 hrs.
Full cure time @25 °C	ASTM D1640	7 days
Adhesion To Concrete	ASTM D4541	>2.5 MPa
Tensile strength@14days	ASTM D2370	>6N/mm ²
Elongation	ASTM D2370	>3.5%

CHEMICAL RESISTANCE

The fully cured PlekoGuard EPU meets the requirements of MPI#77 and exhibits resistance to the following substances:

- Sulphuric acid (H₂SO₄) 50%
- Sodium hydroxide 40g/L
- Hydrochloric acid (HCl) 20%
- Nitric acid (HNO₃) 20%
- Acetic acid 20%
- Phosphoric acid (H₃PO₄) 20%
- Citric acid 20%
- Lactic acid 20%
- Formic acid 10%
- Ammonia 30% & Alum at 60°C
- Benzene & Kerosene
- Chlorine
- Saltwater
- Soda solution (saturated) (Na₂CO₃).

INSTALLATION

MIXING

First, stir the base component separately. Then, pour the entire contents of the smaller container (the hardener) into the base container.

Mix thoroughly for at least one minute using a mechanical mixer with a slow or medium-speed drill.

Inadequate mixing may cause color inconsistencies

SUBSTRATE PREPARATION

For optimal adhesion of PlekoGuard EPU, it should be applied to sound, clean, and dry substrates.

Concrete surfaces:

Concrete should have a minimum compressive strength of 25 MPa. Any laitance, oil, grease, or fatty contaminants should be removed using a suitable degreaser, sandblasting, or steam cleaning. Cracks, grooves, and holes must be filled with an appropriate repair mortar before application.

Steel Surfaces:

Steel substrates should be free from dirt, oil, and grease, and must be blast cleaned to Sa 2½, as per EN ISO 12944, Part 4.

APPLICATION

After mixing, PlekoGuard EPU should be applied immediately using a brush, roller, or spray, ensuring a smooth, uniform coating.

For optimal protection, apply two coats, each with a dry film thickness (DFT) of 80 microns, allowing 24 hours of curing time between coats.

CLEANING

Clean all tools and application equipment with solvent cleaner immediately after use. Hardened/cured material can only be removed by mechanical means

STORAGE

Store PlekoGuard EPU in a dry shaded place, in its original, sealed, and undamaged packaging.

Recommended storage temperatures are between +5°C and +35°C. Protect the product from direct sunlight, heat sources, and moisture.

Shelf life is 12 months from production date.

HEALTH AND SAFETY

PlekoGuard EPU should not be ingested or allowed to come into contact with the skin or eyes. Appropriate personal protective equipment, such as gloves and safety goggles, must be worn during handling and application.

In case of eye contact, rinse immediately with plenty of water and seek medical advice.

If the product comes into contact with the skin, wash thoroughly with soap and water.

If swallowed, do not induce vomiting - seek immediate medical attention.



PRODUCT DATASHEET
PlekoGuard EPU

Attention

This product is intended for use by qualified professional contractors, as a component of a larger construction system and specification. It should be installed in accordance with given instructions and specifications. Information listed above reflects the criteria for our internal quality test and practical experience. Results depend on listed instructions and consumer skills and are therefore out of our responsibility whether expressed or implied. All values are valid for the product when dispatched from the plant. Technical data are generated under laboratory conditions, some variations are expected due to weather, site, and application conditions which are beyond the control of the manufacturer. We reserve the right to change any given specification without notice.