

Polyguard PU



TO SEAL & PROTECT

Technical Data Sheet

DESCRIPTION:

Polyguard PU is high quality polyurethane coating, which can be applied to metal concrete and cured epoxy systems to provide a chemical and abrasion resistant UV stable protection. It is supplied as a two pack systems, solvent base ready to apply by mixing on site.

USES:

To have a high-grade protection to a variety of exposed surfaces of aggressive environments. Areas of application are:

- ▶ Sewage works/ Effluent plants.
- ▶ Chemical processing area.
- ▶ Concrete floors/ Factory warehouses.
- ▶ Swimming pool decks.
- ▶ Bridge Decks.
- ▶ Jetties harbours.
- ▶ Stadium, Balconies & Plant rooms.

ADVANTAGES:

- ▶ Excellent U.V and chemical resistance.
- ▶ Can be applied to many different substrates and cured epoxy.
- ▶ Excellent surface finish with different colours.
- ▶ Two part, easily mixable and eliminates the problems of single component material.

TECHNICAL PROPERTIES

Pot Life	: 30-40 min at 25°C
Density	: 1.2 g/cc
Solid Content	: 65%
Pendulum Hardness	: 73 seconds
Abrasion Resistance	: 50 mg
(ASTM-D-4060) 10 N load, 1000 cycles, CS 10 roller.	
Touch Dry	: 4 Hours at 25 °C
Re-coatable	: 24 Hours
Full Cure	: 7 Days
Colour	: Grey (Other colours on request)
Resistance to	: Dilute acids, alkalis, solvent, starch solution and milk.
Application thickness	: 120-150 microns WFT / Coat (i.e. 70- 95 micron DFT/ Coat)
Coverage	: 6-8 m2/ lt. depending on the surface finish.

Mix ratio : 4:1 by vol. (Part A : Part B)
Application Temperature : +10°C to + 45°C
Service Temperature : -20°C to + 75°C

APPLICATION INSTRUCTION

Surface preparation

Concrete

The surface to be coated must be clean, dry and free of laitance, oil, grease or any substance that may impair adhesion. Methods of substrate preparation includes, grit blasting, high- pressure water jet cleaning, surface grinding etc. Weak or damaged concrete must be removed and repaired properly by Polybit repair systems like Polycrete range of products or Polyepoxy NF.

Prime the surface with Polyprime EP (Solvent free 100% solid epoxy primer @ 4-5 m²/kg) depending on the substrate condition.

Metal

Surface should be blasted to a fine finish. If necessary prime the surface with Polyprime EPS.

Fully Cured Epoxy Surface

Clean the surface well, remove dust or any oil, which is left on the surface and directly apply Polyguard PU

NOTE:

All the primers should be completely dried before applying Polyguard PU.

Mixing

Mix both parts of Polyguard PU thoroughly for a few minutes to remove any sediment. Then add the contents of Part B to Part A and mix with a suitable paddle mixer fitted to a slow speed drill. The mixing is to be continued till a uniform and homogenous consistency is achieved.

Application

The material can be applied with a brush, roller. Apply the mixed material @ 120- 150 micron WFT. If required a second coat can be applied at right angles to the first coat at the same coverage rate. For getting an anti skid finish, broadcast Aggregate no. 8 @ 0.5 – 1.2 kg/m² on the wet primer. Leave it for 24 hours and then when the primer has fully set, brush/ vacuum away the excess aggregate from the surface. Apply the top coat as specified.

COCERAGE:

Primer : 4-5 m²/lt.
Aggregate No.8 : 0.5- 1.2 kg/m²
Polyguard PU : 4-5 m²/lt./coat.

PACKING

Primer : 5lt.
Aggregate No.8 : 24 kg bag.
Polyguard PU : 4 lt. & 20 lt.

CLEANING

Clean all the tools with Polysolvent immediately after use. Hardened material can be removed mechanically only.

STORAGE & SHELF LIFE

Store in a cool dry and shaded place. Protect from extreme weather conditions like storm & rain. The shelf life will be 6 months out of contact with moisture at standard storage conditions.

HEALTH AND SAFETY

As with all construction chemical products, caution should always be exercised. Protective clothing such as gloves and goggles should be worn. Treat any splashes to skin or eyes with fresh water immediately. Should any of the products be accidentally swallowed, do not induce vomiting, but call for medical assistance immediately.