

Chemclear PU (G)

2-component, PU-based, versatile clear coat for concrete, wood, and metal.

Product Description

Chemclear PU is a 2-component polyurethane resin-based clear transparent protective coating specially formulated for a wide variety of substrates, like concrete, metal, and wood. It is available in a gloss finish. It can be directly applied on metal as a clear coat or as a protective clear topcoat on previously coated substrates.

Uses

- Protective coating against internal atmosphere.
- Corrosion protection of internal structures.
- For a chemical manufacturing plant

Salient Features:

- Corrosion protection
- Good chemical resistance
- Easy to apply
- Gloss finish
- Low dirt pick up

Product Data

Appearance / colour:	Chemclear PU [G] Resin :	Clear liquid
	Chemclear PU [H] Hardener :	Transparent viscous Liquid



Storage Conditions/Shelf Life

6 months from the date of manufacturing if stored properly in undamaged seal packaging, at a temperature between 10 °C- 30 °C. It should be kept in a cool, well-ventilated area, away from heat, direct sunlight, sparks, and children.

Technical information

Property	Test Method	Value and Unit
Mixing Ratio	NA	Pre weighed kit
Pot Life @ 30 °C	CPI 1002	2-3 hr.
Touch Dry	CPI 1002	10 min
Full cure	CPI 1002	24 hrs.
	CPI 1002	
Coverage for 150 microns in 2 coats	CPI 1010	150 gm/ m2 /coat depending on
		porosity of substrate

Method of Application

All Chemsol Products are recommended to be applied only by Approved Applicators and should be handled after using proper PPEs like Gloves, mask, goggles, etc.

Application conditions



Substrate temperature: 10-40 °C



Substrate moisture content: - <5%



Relative humidity: 80%max

Note: The substrate temperature must be at least 30 °C above the prevalent dew point temperature to reduce chances of condensation on the floor.

Substrate Preparation

Concrete substrates

Concrete substrates must be prepared mechanically using abrasive blast cleaning, Scarifying or grinding equipment to remove cement laitance and achieve an open textured surface. Remove weak concrete and expose surface defects such as blowholes and voids. Repairs to the substrate, filling of blowholes/voids, and surface levelling must be carried out using appropriate products. Ensure that the dust, loose and friable material is completely removed from all surfaces by brush and vacuum before application of the product.

The concrete substrate has to be primed or levelled with Chemprime in order to achieve an even surface. Allow the primer to cure for 5-6 hours.

Metal substrates

The substrate must be dry and free from the presence of any rust or existing coatings. For proper bonding, roughen the surface with sandpaper or by wire brush. Clean the



surface properly before applying the coating. Chemclear PU clear coat can be directly applied as a barrier coat for mild corrosion protection against atmospheric humidity; however, if the substrate is frequently in touch with water, it is highly recommended to use zinc phosphate-based high-performance primers like Chemphos/ Epophos.

Mixing

Mix chemclear PU resin and hardener as per the ratio with low-speed (250–300 rpm) mechanical stirrer till it becomes homogeneous without generating air bubbles.

Application

After mixing, apply by roller, brush, or spray on the prepared surface in 1 or 2 coats as perthe system. Before application, clean the roller brush of loose fibers by rolling on adhesive tape.

Cleaning of Tools

Clean all tools and application equipment with water immediately after use. Hardened and/or cured material can only be removed mechanically.

Packing

Chemclear PU Resin, Hardener and aggregates are available in pre weighed kit

Storage conditions

Store in a dry and covered shed between 5 °C to 30 °C, away from sources of heat and naked flame.

Handling & Safety

Keep the containers tightly sealed when not in use. Avoid skin contact and inhalation of fumes (if any). While spraying, it is advised to wear a mask. If it comes in contact with the body, wash affected parts with plenty of water. In case of persistent irritation, contact a physician.

Disclaimer: The Information provided is based on our experience, thorough investigations & sophisticated testing methods, but due to the vast number of applications and usage methods, Chemsol Polymer Industries cannot accept responsibility of any kind for any particular result. It is the responsibility of the user to verify the suitability of the product for their end use and in accordance with the rules and regulations of that country /territory. All information provided pertaining to our products should be treated only as a guidance tool without any guarantee or warranty of any sort.

* All CPI test methods are our scientifically designed internal test methods which can be shared upon