

CP WP-TOP

Description

Polyurethane coating is a high-performance, versatile protective finish formulated from polyurethane resins. Available in two-component, PU coatings are excellent balance of **durability, flexibility, chemical resistance**, and **aesthetic finish**.

Uses

- Pharmaceutical manufacturing plants, Electronic assembly units, Hospitals, Server & Data Rooms, Warehouse and logistic centres, TV studios, Aircraft hangars, , Electrical substations and panel rooms, Workshops, Retail areas, Showrooms, Exhibition halls, Laboratories, Cleanrooms, Food processing area

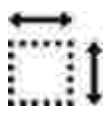
Features & Benefits

- **Durable Protection:** High resistance to abrasion, impact, and mechanical stress.
- **Chemical & UV Resistance:** Protects surfaces from oils, solvents, acids, alkalis, and weather exposure.
- **Flexibility:** Accommodates substrate movement, making it suitable for both rigid and flexible materials.
- **Aesthetic Finish:** **matt finishes**, with excellent color retention and clarity.
- **Waterproofing:** Often used as a moisture barrier on concrete or other porous substrates.
- **Adhesion:** Strong bonding with substrates like concrete, metal, wood, and plastic.
- Available in a variety of **colors**.

Properties

Form	Part A – Base Part B – Hardener
Mixed Density	1.08
Application thickness	300 micron
Pot Life	15-20 minutes @ 25 degC
Tack free time	4-6 hours
Chemical Resistance	Wide range of acids, alkalis, solvent, petrol, diesel, lubricating oil etc.,

Additional Information

COVERAGE RATE	PACK SIZE	SHELF LIFE
		
Concrete: 5 SQMTR/1 LTR (200 MICRON - DFT)	(5 LTR BOX) (9:1) Resin: 4.5 Hardner:0.5	12 months from date of manufacture if stored in shaded and dry area.

❖ **Note Protection coating required for outdoor application**

Application Methodology

1. Surface Preparation

- **Concrete must be clean, dry, and free of contaminants** (oils, grease, curing agents, etc.).
- **Mechanical profiling** (shot blasting, diamond grinding) to achieve a **Concrete Surface Profile (CSP) of 3–5**.
- **Moisture test** may be required—urethane cement can handle high moisture, but excessive levels may need a primer.

2. Mixing the Components

Polyurethane coating is a **two-component system** (resin, hardener).

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- **Mix at correct ratios** using a **high-speed drill mixer** (low-speed for larger batches).
- **Mix time:** 2–3 minutes until a uniform consistency is achieved.
- Apply after mixing (usually 20–30 minutes).

3. Application Methods

A. Slurry System (Self-Leveling Application) (1 mm thickness)

- **Used for:** Smooth, seamless floors in food, pharma, and chemical plants.
- **Process:**
 1. Pour the mixed material onto the prepared surface.
 2. Spread using a **notched squeegee or trowel**.
 3. Use a **spiked roller** to remove air bubbles.
 4. Optional: Broadcast sand or quartz for texture.

B. Broadcast System (Slip-Resistant Application) (1-2 mm thickness)

- **Used for:** Heavy-duty, high-traction flooring.
- **Process:**
 1. Apply a **self-leveling base coat**.
 2. **Broadcast aggregate** (sand or quartz) into the wet material.
 3. Let it cure, then **remove excess aggregate**.
 4. Apply a **topcoat** to seal and lock the broadcast layer.

4. Curing & Finalization

- **Initial Cure: 12–24 hours** (light foot traffic).
- **Full Cure: 5–7 days** (chemical resistance and heavy loads).
- Maintain **proper temperature and humidity** during curing.

Tips for Best Results

- ✓ Work in **sections** to avoid material setting before spreading.
- ✓ Maintain proper **temperature and humidity** levels as per the product's technical data sheet.
- ✓ Use **spiked shoes** when walking on wet to avoid footprints.
- ✓ Always wear **protective gloves, eyewear, and a respirator** when handling epoxy products.

Application Restrictions

- Avoid application below 5 deg C and above 40 deg C. Pot life of mixed material will change based on ambient temperature.
- Substrate moisture must be checked prior to application.
- **Need protection coating for outdoor application**

General Terms & Conditions

Users must always refer to the most recent data sheet. Upon request, additional copies will be provided. This technical data sheet is given in good faith and does not guarantee the optimum utility of the product always. The information contained herein is believed to be reliable to the best of our knowledge. Color Plus is exempted from all legal liability in case of injury incurred from product handling without appropriate technical precautions.

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