



## PURACOAT ST400 Topcoat

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### Two-Component Aliphatic Polyurethane Coating For metal and concrete substrates over suitable primers

**Product Description:**

PURACOAT ST400 is a high-performance, two-component polyurethane topcoat that provides excellent gloss retention, UV stability, abrasion resistance, and chemical durability. It is designed for use as a protective and decorative finish on both metal and concrete surfaces when applied over appropriate primers. The coating forms a tough, flexible, and weather-resistant film suitable for industrial, marine, and architectural environments.

**Key Features & Benefits:**

- Excellent UV and color stability
- High mechanical strength
- Excellent chemical resistance
- Strong inter-coat adhesion
- Non-yellowing aliphatic finish
- Easy application

**Areas Of Application:**

- Protective topcoat for steel, galvanized steel, and aluminum structures
- Concrete floors, walls, and structural elements
- Industrial plants, chemical zones, machinery, and outdoor equipment
- Refineries, power plants, bridges, and transportation infrastructure
- Suitable for interior and exterior applications requiring long-term color and gloss stability

**Surface Preparation:***Metal Substrates*

- Abrasive blast clean to Sa 2½ (ISO 8501-1) or equivalent.
- Remove all dust, oil, and contaminants.
- Apply a suitable anti-corrosive primer.
- Ensure primer is within the recommended overcoat window and free of surface defects.

*Concrete Substrates*

- Surface must be sound, clean, and dry, free of laitance and loose particles.
- Moisture content should be below 5 %.
- Apply a suitable concrete sealer or primer.
- Allow the primer to cure before topcoat application



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### Mixing Instructions:

- Stir each component separately prior to mixing.
- Combine components and mix thoroughly using a slow-speed mechanical mixer for 3–5 minutes until a homogeneous consistency is achieved.
- Allow the mixed material to stand for 5 minutes before application.

### Application Guidelines:

- PURACOAT ST400 can be applied using airless spray, conventional spray, brush, or roller, depending on site conditions and project requirements.
- Use an airless Spray Tip Size of 0.013 – 0.017 inch with a recommended Spray Pressure of 150 – 180 bar.
- Ensure an ambient temperature of 10°C to 40°C with a humidity level below 85%.
- Wait a minimum of 8 hours and maximum of 5 hours before applying an overcoat.
- All tools and equipment must be cleaned immediately after use using Thinner No.10.

### Coverage / Consumption:

Theoretical coverage: 9–10 m<sup>2</sup> per liter at 50 µm DFT.

Consumption may vary depending on thickness, application method, surface and wastage.

### Curing & Protection (at 25°C):

Touch Dry : ~1 hour  
 Hard Dry : ~8 hours  
 Full Cure : 7 days

### Packaging:

PURACOAT ST400 comes in 2 sets:

5kg set:	20kg set:
Component A: 3.75 kg	Component A: 15 kg
Component B: 1.25 kg	Component B: 5 kg

### Storage & Shelf life:

Store for up to 12 months in unopened packaging. Keep in cool, dry conditions away from frost and moisture and direct sunlight.



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### Health & Safety:

Use only with adequate ventilation. Wear suitable PPE including gloves, goggles, and respirator. Avoid skin and eye contact. In case of contact, rinse immediately with water and seek medical advice. Dispose of waste material in accordance with local regulations. Please refer to the MSDS for more information.

### Technical Data:

Property:	Value:
Volume solids	70% +- 1%
Theoretical coverage	9-10 m <sup>2</sup> /L at 50 µm DFT
Recommended film thickness	60 to 80 microns
Mixed viscosity (25 °C)	400-800 cP
Pot life (25 °C)	~4 hours
Touch dry	1 hour
Hard dry	8 hours
Full cure	7 days
Adhesion (ASTM D3359)	5B – Excellent
Flexibility (ASTM D522)	Pass 1 mm mandrel
Impact resistance (ASTM D2794)	> 160 in-lb
Gloss retention (QUV-A, 1000 h)	> 90 %
Salt spray resistance (ASTM B117, 1000 h over primer)	No blistering, rust, or creep