# **Technical Data Sheet**



# ProShield PU 587 W

## **Product Description**

High-performance polyurethane-based system, engineered through advanced resin modification and the incorporation of specialized additives and fillers. Designed for demanding applications in both wet and dry environments, it delivers a durable, non-slip surface that ensures safety under diverse conditions. Its formulation provides exceptional chemical resistance, safeguarding against exposure to acids, alkalis, oils, and cleaning agents. The result is a versatile protective solution that combines mechanical strength, long-term reliability, and user safety — making it ideal for industrial flooring, commercial facilities, and environments requiring superior performance.

# **Product uses:**

- Industrial flooring (factories, warehouses, workshops)
- Food processing and commercial kitchens
- Parking decks and ramps.
- Floors exposed to very low temperature
- Chemical storage and processing areas.
- Public facilities requiring slip resistance and hygiene.

## **Properties**

- Non-Slip Surface: Enhanced safety in wet and dry conditions
- Chemical Resistance: Protects against acids, alkalis, oils, and cleaning agents.
- Durability: Excellent mechanical strength and abrasion resistance.
- Versatility: Suitable for industrial flooring, commercial facilities, and protective topcoats
- Easy Application: Designed for professional use with standard coating equipment

# **TECHNICAL PROPERTIES**

Appearance/Color Semi flat / RAL Color Card

Density: 1.98 kg/liter

Consumption: 2 kg / m<sup>2</sup> (1000 Micron DFT)

Recommended DFT: 4-6 mm

(Dry Film thickness)

Compressive Strength: 52 MPa

Abrasion Resistance: ~ 70 (ASTM D 4060)
Shore D: ~ 75 (ASTM D 2240)
Abrasion Resistance: ~ 70 (ASTM D 4060)
Tensile strength: 9 MPa (ISO R527)
Concrete Adhesion: Concrete Failure

*Surface dry:* 5 - 7 approx. hour(s) 23°C/73.4°F 50% R.H

Light foot traffic 24 hours (23°C and 50% R.H.)

Full cure time: 7 days (23°C and 50 % R.H.)

Application temperature: +8 °C/46.4° F and +35 °C/95°F

*Min. cure temperature:* +10°C/50°F

**Application Details** 

Mixing Ratio: Component A: 5 – Component B: 5- Component C: 20 Component

(By weight)

Pot Life: 20 – 30 (23°C) (DIN 16945)

Application method: Metal Trowel

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## **Surface Preparation:**

The application surfaces should be free from oil, rust, dust and similar impurities. There should not be moisture on the application surface, there should be no loose layer left. The shiny surface should be roughed with shot-blast, slim or freeze. The prepared concrete surface should be primed with Solvent Free Epoxy Impregnated Primer in a way to be impregnated by considering the application instructions. Cracks and holes on the surface, if any, should be repaired using epoxy putty. Following the mixing process at least 24 hours after the primer, Water-Based Polyurethane Floor Coating with High Chemical and Mechanical Resistance is poured on product primed surfaces and spread with a toothed trowel or squeegee to be approximately 3 mm, preferably 5 mm. The surface is immediately

#### **PRECEDING COAT:**

### > Top Floor 600-SF

### **Important Remarks:**

- Surfaces must have enough structural strength.
- Concrete should have minimum of 25 N/mm<sup>2</sup> compression resistance and minimum 1, 5 N/mm<sup>2</sup> tensile strength.
- Applications below 10°C should be avoided.
- High temperatures lower the pot life of the product, while low temperatures extend cure time and consumption.
- Be careful about product mixing ratios.
- The surface should be protected from moisture and rain for 8-10 hours after application.
- All application tools and equipment should be cleaned with thinner immediately after the use. Cured material can only be removed mechanically.
- Use only where application and drying can proceed at temperatures above: 10°C/50°F. The
  temperature of paint itself should be 15°C/59°F or above. Apply only on a dry and clean
  surface with a Temperature above the dew point to avoid condensation. In confined spaces
  provide adequate ventilation during application and drying.

## Shelf life & Storage:

12 months from date of production if stored properly in original, unopened and undamaged sealed packaging in dry conditions at temperatures between +5°C and +30°C.

## Safety:

For information and precautions on the safe handling, transportation storage and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.

## **Legal Notice:**

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