

BTL TPA PU

Single Component, Self-Curing Waterproofing Coating

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REV 05

THE PRODUCT



BTL Thermoplastic Polyurethane (PU) is a single-component, self-curing liquid membrane based on high-quality thermoplastic polyurethane resin.

It forms a seamless, flexible, and highly durable waterproof coating that provides long-lasting protection against weathering, water penetration, and surface degradation.

This coating cures to form a uniform, water-tight, and UV-resistant film with excellent mechanical properties and strong adhesion to various substrates.

USES

- Waterproofing of concrete roofs, terraces, and walls.
- Protective coating for cementitious and concrete floors (when used with compatible BTL PU Primer).
- Ideal for exterior waterproofing where elasticity, UV stability, and long-term durability are required.

*May discolor when left exposed.
This is aesthetic only and does not affect performance.*

BENEFITS

- ✓ 100% Watertight (Prevents all forms of water penetration)
- ✓ UV Resistant (Withstands prolonged sunlight exposure without degradation)
- ✓ Non-Yellowing (Maintains color stability when diluted with xylene)
- ✓ Excellent Adhesion (Bonds strongly to concrete and other substrates)
- ✓ High Flexibility (Withstands surface movement and temperature changes)
- ✓ Easy Maintenance (Easily repairable and recoatable)
- ✓ High Durability (Excellent resistance to mechanical wear and scrubbing)

SPECIFICATIONS

Property	Standard	Unit	BTL TPA PU
Solid Content	ASTM D1644	%	85 (± 2%)
Specific Weight	ASTM D1475	kg/L	1.35
Tensile Strength	ASTM D412	N/mm ²	8
Elongation at Fissures	ASTM D412	%	200
Adhesion to Concrete	ASTM D4541	N/mm ²	> 3
Hardness (Shore A)	ASTM D2240	N	70
Resistance to Water Pressure (1 m water column / 24 hrs)	DIN 1048	-	No effect
Low Temperature Flexibility (at -40°C)	ASTM D522	-	No cracking
Resistance to Microbial Growth	ASTM G21	-	Resistant to bacteria and algae

ADDITIONAL INFORMATION

Handling and storage

BTL TPA PU is available in 25 kg and 5 kg containers. Store in a cool, dry, and well-ventilated area. Avoid direct sunlight and exposure to heat sources.
Recommended storage temperature: below 30°C.
Shelf life: 12 months in unopened containers under proper storage conditions.
Available Colors: White, Clear, Black (other colors available on request).

Installation

Surface Preparation

Ensure the substrate is completely clean, dry, and free from dust, grease, oil, or any loose material. For highly absorbent surfaces, apply **BTL PU Primer** to enhance adhesion.

Mixing and Application

- Stir the product thoroughly before use.
- Dilute up to 30% using Xylene if required for ease of application.
- Apply using brush, roller, or airless spray in thin, even coats.
- Recoating Time: 8–12 hours between coats.
- Full Curing Time: 24 hours.

Tool requirements

Apply the material with roller or brush in two, at least, coats. Leave 6-24 hours between coats.

Health, Safety & Environment

Keep away from heat, sparks, open flames, and hot surfaces.

Use only with adequate ventilation.

Avoid breathing vapors or spray mist.

Wear appropriate protective gloves, clothing, and eye/face protection.

Wash hands thoroughly after handling.

Keep out of reach of children.

Avoid release to the environment. Dispose of contents/container in accordance with local regulations.

Fire-Fighting: Measures: Use foam, dry chemical, or CO₂ extinguishers. Avoid using water jets.

CERTIFICATION

Tested and approved according to **ASTM, ISO, and EN** standards listed above.
Complies with **BTL internal quality assurance standards** for performance and durability.

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BTL reserves the right to modify the technical data in this specification sheet, which is based on current production without prior warning.
All indicators in this specification sheet are based upon our experience and current working practices.