

# TuffPoxy<sup>™</sup> 10

## Waterproofing Epoxy Concrete Sealer

#### 1.01 DESCRIPTION

TuffPoxy™ 10 is a high solids, two-part epoxy coating system. It is designed as a waterproofing sealant and protective coat for concrete surfaces. Please use the correct product grade that complies with VOC regulations as per federal, state, county and city regulations/codes at the place of installation of product.

#### **1.02 USES**

- Waterproofing of tops of concrete columns
- Sealing of concrete floors and walls
- Waterproofing of any concrete substrates
- · Abrasion resistant finish for concrete
- Rubber-wheeled vehicles and heavy foot traffic
- High abrasion and chemical resistance areas
- Automotive service areas, Warehouse flooring
- Laboratories, Clean rooms

#### **1.03 FEATURES**

- 99% solids epoxy coating system
- Minimal sag on vertical surfaces
- Seals moisture away from concrete cracks
- Protects concrete reinforcing
- Low viscosity for easy application
- Long pot life
- Pre-measured packaging of components.
- Minimal shrinkage upon cure
- Prolongs service life of concrete surfaces
- Exceptional tensile strength
- Good chemical resistance for long-term protection
- Easily applied with a paint-like viscosity
- Available in standard colors on request
- Excellent bonding to all structural substrates.
- Super abrasion resistance for long-term wear.
- Fast in service time 24 Hours or less

#### **1.04 TECHNICAL DATA**

**TuffPoxy™ 10** meets or exceeds the ASTM C881, Types I and IV, Grade 1, Class C standard. Meets requirements for TxDOT DMS-6100 Type X Epoxy.

#### 1.05 PACKAGING

1-gallon kit: 3/4 gallon can of Side A Base (2.84 liters) and 1 quart can (0.94 liters) of Side B Converter

5-gallon kit: 3 3/4 gallons pail of Side A Base (14.2 liters) with 1-1/4 gallons (4.73 liters) pail of Side B Converter (Side A Base and Side B Converter in the same pail)

#### **1.06 COLOR**

Concrete Gray

#### **1.07 COVERAGE**

100 sqft/gallon or 1 gallon/100 sqft (0.41 liters/sqm)

#### 1.08 PREPARATION

Proper surface preparation is imperative for maximum service life. The concrete surface to be coated should be cleaned of all dirt, oil, grease, loose particles, and previous coatings. This is best achieved by sandblasting and/or water blasting, then ensuring that the surface is completely dry.

#### **1.09 MIXING**

Combine and mix **TuffPoxy™ 10** components Side A Base and Side B Converter in proportional parts as prepackaged by the PolyTuff Systems. A mechanical agitator such as a power drill with a mixing paddle attached should be used for about one minute per gallon of material being mixed. Hand mixing should be limited to very small projects. When using **TuffPoxy™ 10** epoxy, combine three parts of Side A and 1 part of Side B. Mix thoroughly. Properly mixed, the epoxy will be uniform gray, without visible streaks.

#### 1.10 APPLICATION

Apply a thin, uniform film of mixed **TuffPoxy™ 10** to the substrate to be coated using a brush, roller or airless spray equipment at a spread rate of 100 square feet per gallon to yield 14 to 15 mils (355- 381 microns), wet film thickness, making sure of uniform coverage. Take care not to puddle materials and ensure even coverage.

### 1.10 CURING/DRY TIME

Cure Time: Initial- 8 hours; Final-7 days.

Dry Time: 8 hours. Recoat Time: 8-24 hours

#### 1.11 CLEANUF

Uncured epoxy may be cleaned off of tools with Methyl Ethyl Ketone (MEK), Toluene, Xylene, or solvent blends. Caution: These solvents may damage plastics.

## 1.12 STORAGE AND SHELF LIFE

Store in a horizontal position to prevent moisture accumulation on the drum head. The material should be stored between 40–95°F (4°–35°C) in a cool, dry area away from direct sunlight. The shelf life of properly stored is 12 months from the date of manufacture. An excessive temperature differential and/or high humidity can shorten the shelf life expectancy.

#### **1.13 LIMITATIONS**

DO NOT place at temperatures below 40°F (5°C). Avoid hazards by following all precautions found in the Safety Data Sheets (SDS), product labels, and technical literature. Wear protective gloves and goggles. Avoid prolonged skin contact

READ SDS PRIOR TO USING PRODUCT. KEEP OUT OF THE REACH OF CHILDREN.

1.14 PHYSICALS	
Coating Type	Epoxy cured with Polyaminoamide/Polyoxpropylenediamine
Pigmentation	TiO2
Gel Time (60 g mass)	45 minutes
Tack Free Time (73°F or 23°C)	3 to 5 hours
Tensile Properties (ASTM D638)	
7 day cure Tensile Strength:	10000 psi (69.0 MPa)
Tensile Elongation:	1.2%
Bond Strength (ASTM C882)	
2 day cure:	2100 psi (14.5 MPa)
14 day cure:	2200 psi (15.2 MPa)
Compressive Properties (ASTM D695)	
7 day cure Compressive Strength:	11,000 psi (75.9 MPa)
Compressive Modulus:	300,000 psi (2,070 MPa)
Shear Strength (ASTM D732)	6000 psi (41.4 MPa)
Flexural Strength (ASTM D790)	7500 psi (51.7 MPa)
Shrinkage on Cure (ASTM D2566)	0.001
Thermal Compatibility (ASTM C884)	Pass
Heat Deflection Temperature (ASTM D648)	123°F (50°C)
Water Absorption (ASTM D570)	0.3% (24 hr)

Please read all information in the General & Safety Guidelines, Technical Data Sheets, Guide Specifications and Safety Data Sheets (SDS) before applying material. PSI Products are for "Professional Use Only" and preferably applied by professionals who have prior experience with PSI Products or have undergone training in application of PSI Products. Published technical data and instructions are subject to change without notice. Contact your local PSI representative or visit our website for current technical data, instructions, and project specific recommendations.

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