



POLYPIPE -10289

Conformity to EN 10289

Epoxy 100% solid

➤ Description:

A two-component, 100% solid, based on polyamine Epoxy resin, can be applied with spray. It is designed especially to protect of buried metal pipelines of oil, gas and water against corrosion at harsh environments. Features that distinguish this product include: excellent corrosion resistance, high chemical and mechanical resistance, abrasion resistance, excellent adhesion and suitable hardness.

➤ Advantages:

- 100% solid, without VOC
- Suitable chemical resistance
- Excellent corrosion protection
- Very low permeability
- Applicable in wide temperatures
- Excellent resistance against cathodic disbondment
- High adhesion
- High hardness
- Excellent durability in industrial and marine environments
- Excellent water resistance
- Suitable impact resistance
- High build, can be applied to high thickness in one layer
- No need to primer
- Mixing ratio by weight and volume are the same

➤ Main uses :

Corrosion protection of structures, pipes, fittings, cut backs ... in:

- exterior of buried metal surfaces
- metal surfaces immersed in brackish and fresh water
- Coating of equipment in power plants, petrochemical units, refineries
- Metal surfaces exposed to Acidic and alkaline chemicals and salt solution

➤ Physical properties @ 24°C:

Glossy	Semi-matt
Solids by volume	100%
VOC	0 g/L
Theoretical coverage	1-1.5 m ² /L
Thickness per layer	700-800 micron
Recommended thickness	1000-1500 micron
Number of coats	1-2 (depends on desired thickness)
Density (A)	1.69±0.1 g/cm ³
Density (B)	1.56±0.05 g/cm ³
Density (A+B)	1.66±0.1 g/cm ³
Mix ratio (by weight)	A/B = 2 / 1
Mix ratio (by volume)	A/B = 2 / 1
Curing method	Chemical reaction
Adhesion (after 7days)	More than 2000 psi



(ASTM D4541)	
Hardness(shore D)	More than 78
Impact resistance	>7.6 J
Cathodic disbondment (EN-10289)	Less than 6 mm
Salt spray (10000 hours) ASTMB 117	Absolut resistant
Packaging*	A: 10 kg B: 5 kg 200, 250 kg drums

*Available in small packages.

➤ **Processing properties**
@ 54% RH:

Gel time	+25 °C	50±5 min
	+60 °C	15±5 min
Tack free		2-4 hours
Post cure		8 hours
Full curing		7 days

➤ **Application guide direction:**

- Surface preparation :
Surface preparation should include blast cleaning (sand, grate, shot... blast) up to Sa2.5 and to a minimum of 50-70 microns anchor profile. Then remove dusts by blowing compressed dry air. During blasting operation and coating application, the substrate temperature should be 3°C more than dew point.
High relative humidity may affect adhesion negatively. So maximum allowed relative humidity would be 85%. In some cases pre heating of pipes may be needed. The

substrate must be coated max in 4 hours after sand blasting, if not, the surface preparation process must be done again. It is recommended to wash the salt contaminated surfaces before and after sand blasting. After washing surface, sand blast should be repeated.

- **Mixing:**

POLYPIPE -10289 must not be diluted at all. Use appropriate solvent for purge line. Thoroughly mix part A, B with air using suitable mixer until a homogeneous mixture and color is obtained.

- **Applications:**

This material must be applied utilizing high-pressure, heated plural component spray proportioning equipment. Leave the cut backs (about 75 mm) uncoated.

- **Limitation :**

Do not open the packages till application time. Should be stored in a sealed container after opening.

- **Storage :**

24 months in factory delivered, unopened drums. Keep away from extreme heat, freezing, and moisture.

- **Warning :**

This product may cause allergic problems when contacts with skin or inhaled. Special clothes, masks and anti-chemicals gloves should be utilized during spraying process. Protective creams and glasses should be used in order to protect skin and eyes, respectively to avoid contact with material and spray dust.