



PFEP-2251

100% solid Epoxy Coating

Conformity to AWWA-C210 and BS6920

► Description:

PFEP-2251, based on Amine-cured Epoxide resin, is a two-component, 100% solid, high qualified epoxy coating. This coating has excellent adhesion to treated bare steel and/or epoxy systems, with excellent resistance to alkalis, acids, chemicals, and bacteria as well as great mechanical properties.

► Advantages:

- Can be used in contact with potable water without any defect on water quality
- Good adhesion to treated bare steel and epoxy coating systems
- 100% solid, without VOC
- Resistant to acids, alkalis, oils, petroleum products, salts, water and microorganisms
- Excellent corrosion protection
- Very low permeability
- Great strength
- Applicable in wide temperatures
- High resistance to water permeation
- Good resistance to puncture, impact, and abrasion
- High build, can be applied to high thickness in one layer
- No need to primer on steel substrates

► Main uses :

PFEP-2251 can be used as:

- Protective lining for steel and concrete tanks
- Protective lining for potable water pipelines or conveyors
- canals and another substrates in contact or immersed in water

► Physical properties:

Color	Any color ordered	
Components	2	
Gloss	Glossy	
Solids content(A+B) by volume	100%	
Number of components	2	
Density (A+B)	1.47±0.1 g/cm ³	
Mix ratio (by weight)	A:B = 3.8:1	
Mix ratio (by volume)	A:B = 2.4:1	
Recommended dry film thickness (DFT)	0.5 -1 mm	
Theoretical coverage* (regarding to recommended DFT)	0.66-1.4 kg/m ²	
Curing method	Chemical reaction	
Packaging	A component	15.2 kg
	B component	4 kg

* No material loss is considered in theoretical coverage calculation.



Processing properties:

Pot Life	at +5 °C	60 minutes
	at 25 °C	40 minutes
	at 35 °C	25 minutes
Tack free time (at +25 °C)		2 hours
Post cure time (at +25 °C)		6 hours
Full cure time		7 days
Recoat time (needed cases), (at 25 °C)		8 hours

Application guide:

- Surface preparation :

Steel Surfaces: Surface preparation should include blast cleaning to a minimum of 65 microns anchor profile or Sa2. Then remove dust by blowing compressed dry air. Grease, oil or similar contamination should be removed from the surface with MEK before blasting operation. During blasting operation and coating application, the substrate temperature should be 3°C above the dew point.

Concrete Surfaces: any loose part of the concrete surface should be removed. It is recommended to use abrasion instrument in order to remove this parts. It is recommended to scratch the surface in order to promote coating system adhesion on concrete. After treating the concrete surface, it should be sealed by the appropriate primer (PFEP-2168 for dry and clean surfaces and Indufloor-IB-1240 for wet or contaminated surfaces).

Defects on the concrete surface should be repaired and surfaced by Polycoat-2050 or PFEP-2249 prior to application of PFEP-2251. If the primer's surface is fully glossy because of complete curing, in order to increase the adhesion between layers the surface of the primer must be activated with MEK.

- Application conditions:

Maximum allowed relative humidity would be 85%. The temperature should be minimum 3 °C above dew point and between +5 °C to +50 °C during application operation.

- Application process:

A-component should be mixed very well by an electrical mixer, then B-component should be added to A-component and the mixture should be mixed by an electrical mixer till getting a homogeneous liquid with a uniform color. This coating can be applied by airless spray, roller and/or spatula.

Storage:

12 Months in sealed containers at +5°C to +30 °C. 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 gloves should be utilized during the spraying process. Protective creams and glosses should be used in order to protect skin and eyes, respectively.