



PFEP-2251/1

100% solid Epoxy Coating

Conformity to AWWA-C210 and BS6920

◆ Description:

PFEP-2251/1, based on Amine-cured Epoxide resin, is a two-component, 100% solid, high build epoxy coating. This coating has an excellent adhesion to the treated bare steel and/or epoxy and polyurethane coating systems, with excellent resistance to alkalis, oils, acids, chemicals, and microorganisms as well as great mechanical resistances and these unique properties made this system suitable enough to be utilized in contact with potable water.

◆ Advantages:

- Good adhesion to the treated bare steel and epoxy coating systems
- High resistance to chemicals, oils, acids, alkalis, chlorides, petroleum based solvents and aromatics
- 100% solid, without VOC
- Excellent corrosion protection
- Very low permeability
- Great strength
- Applicable in wide range of temperature
- 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-2251/1 can be utilized as:

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

◆ Physical properties:

Color	Component A	Green
	Component B	White
	Mix	pistachio green
Gloss		Glossy
Solids by volume		100%
Number of components		2
Density (A+B)		1.45±0.1 g/cm ³
Mix ratio (by weight)		A:B = 2:1
Mix ratio (by volume)		A:B = 2:1
recommended dry film thickness (DFT)		0.3 – 0.5 mm
Theoretical coverage (regarding to recommended DFT)		0.45-0.75 kg/m ²
Curing method		Chemical reaction
Packaging		250 kg drums



◆ **Processing properties:**

Pot Life	at +35 °C	60 minutes
	at +60 °C	15 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)	By spray	4 hours
	By brush	8 hours

◆ **Application guide:**

- Surface preparation:

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

Concrete Surfaces: Any loose particle should be removed. It is recommended to use abrasive tools in order to remove these 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 with 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-

2251/1. If the primer's surface is fully glossy because of complete curing, the surface of the primer must be activated by MEK in order to increase the adhesion between layers.

- 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:

Thoroughly mix **PFEP-2251/1** component A and B with air driven power equipment until a homogeneous mixture and color are obtained.

This material can be applied utilizing high-pressure, heated plural component spray proportioning equipment or by spatula and scraper. In order to reach the best viscosity for spraying during application process, it is recommended to heat component A (resin) to +60±5 °C and component B to +50±5 °C. Leave the cut-backs (about 75 mm) uncoated.

For application by spatula, component A and B should be mixed thoroughly. Then, component B should be added to component A (considering the proper mix ratio of the components) and mixed completely until reaching homogeneous mixture.

PFEP-2251/1 must not be diluted at all. Use appropriate solvent for purge line and flushing of equipment and if spraying stops for a period of time in excess of the pot-life of the material. Cured product may be disposed of without restriction. The uncured resin and hardener portions should be mixed together and disposed of in a normal manner. "Drip-free" containers should be



disposed of according to local environmental laws and ordinances.

◆ **Storage:**

24 months in sealed containers at +5°C to +50 °C

- **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.