



PolyVers International
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Product Data Sheet

FE-100

Epoxy System

Product Description - PolyVers FE-100 is a 100% solids, two-component bisphenol A epoxy system, designed as a coating/liner for concrete pipe, manholes and secondary containment applications. **FE-100** is provided in a convenient pre-measured, two-package kit complete with mixing container for use in field applications. **FE-100** provides excellent adhesion to concrete and steel surfaces.

Uses - PolyVers FE-100 provides excellent resistance to sulfuric acid, sodium hydroxide, detergent, bleach, gasoline and other common waste water contaminants. The use of a **Polyvers** primer (PV 20, 30, 31 or 32) is recommended to reduce pinhole formations and improve adhesion values.

Ideal for Applications In -

- Secondary Containment
- Sewer Pipe Coatings
- Concrete Pipes
- Manholes

Advantages -

- Good Chemical Resistance
- Good Wear and Impact Resistance
- High Build Membrane

Physical Properties -

(Typical)	Test Method	Typical Value
Cured Film Properties		
Solids Content		100%
Adhesion to Concrete	ASTM D4541	Concrete failed
Gel Time-Tack Free	Dependant on ambient temperature	6-7 Hours
Working Time	Dependent on ambient temperature	45 minutes (2 ½ gallon)

Limitations - Do not use when ambient or operating temperatures that come in contact with the installed lining system exceed 49°C (120° F).

Coverage Rates -

Theoretical Square Feet Per Gallon

Mils	10	15	50	60	80	100	125
Sq. Ft.	160	107	32	27	20	16	13

Note: 1604 mil inches per gallon. Totally dependent on substrate texture and condition.

Packaging -

- Two and One-half Gallon Kit: Individual, pre-measured bags of 'A' and 'B' in a 5 gallon pail.

Mixing - Carefully open each pre-packaged container and add to mix vessel. Mix contents of part 'A' and part 'B' using a Jiffy type mixer until uniform color is achieved.

Shelf Life - One year, in original unopened factory containers, under normal storage conditions of 13°C (55°F) to 35°C (95°F). Protect from freezing.

Clean Up - Cured product may be disposed of without restriction. Excess liquid 'A' and 'B' material should be mixed together and allowed to cure, then disposed of in the normal manner. Product containers that are "drip free" may be disposed of according to local, state and federal laws. Tools can be wiped clean with MEK or Acetone while still uncured. If the FE-100 is cured, remove by mechanical means or soak in MEK.

Safety - Material Safety Data Sheets available @ Polyvers.com

Basic safety for personal protection is:

- Long-sleeve overalls or disposable Tyvex overalls
- Rubber gloves
- Splash shield or safety glasses with splash guards
- Rubber or leather boots
- Respirator
- Do not use near high heat or open flame
- Do not take internally
- Keep out of the reach of children

Chemical Resistance -

ASTM D-1308 24 Hour Immersion			
Coffee	no effect	Transmission Fluid	no effect
Vegetable Oil	no effect	Skydrol	no effect
Mustard	no effect	Mineral Spirits	no effect
Whiskey	no effect	10% Hydrochloric Acid	no effect
Urine	no effect	10% Sulfuric Acid	no effect
Gasoline	no effect	10% Acetic Acid	no effect
Motor Oil	no effect	MEK	film destroyed
Brake Fluid	no effect	Xylene	slight softening, film recovers

Preparation and Installation - Surface must be clean and free from contamination. Concrete surfaces must be prepared according to NACE Standard RP0892-92. All surfaces must be free from dust, moisture, oils and contaminants. Concrete must be a minimum of 28 days old. Concrete surfaces must be primed with PV 20, 30, 31 or 32, according to manufacturer instructions. Application of **FE-100** must meet manufacturer's applications specifications. Please consult **PolyVers** for details.

Application may be made either with a stiff paste brush or steel trowel to a thickness of 65 mils. Work the **FE-100** into the surface by applying a "scratch coat" with a steel trowel and then finishing in a crosshatch pattern to build mil thickness. High ambient or surface temperatures can reduce the viscosity, resulting in a reduced total mil thickness. If a second coat is necessary, recoat within 4-6 hours.

Non-Skid Coating: To provide non-skid attributes, or a textured finish, apply a base coat of **FE-100** to a cleaned and primed surface. Immediately broadcast sand aggregate and allow to dry for 24 hours. After cure, brush off excess aggregate. Apply a 10-20 mil topcoat of **FE-100** and allow to cure. Adjust the particle size and amount of aggregate to achieve desired texture.

Technical Services - Sales and Customer Support (913) 321-9000

Warranty - **PolyVers International** will refund the price of or replace, at its election, product it finds to be defective provided the product has been used properly. Except as expressly stated above, the Company makes no warranty of merchantability and no warranty of fitness for any particular purpose, nor does it make any warranty, expressed or implied, of any nature whatsoever with respect to the product or its use. In no event shall the company be liable for delay caused by defects, for loss of use, for indirect, special or consequential damages, or for any charges or expenses of any nature incurred without its written consent.