



VersaFlex Incorporated
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Product Data Sheet

FE-100™ Epoxy System

Product Description- *VersaFlex FE-100* is a high solids, two-component bisphenol A epoxy system, designed as a hand applied 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.

Uses- *VersaFlex FE-100* provides excellent resistance to sulfuric acid, sodium hydroxide, detergent, bleach, gasoline and other common waste water containments. The use of a *VersaFlex* primer (VF 30) 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)		
Cured Film Properties	Test Method	Typical Value
Solids content, cured film		100 %
Adhesion to concrete	ASTM D7234	Concrete failed
Gel time-tack free	Dependent on ambient temperature	6 – 7 hours
Working time	Dependent on ambient temperature	45 minutes (2 ½ gallon)
The value ranges stated in this Technical Data Sheet are based on system processing under laboratory conditions. Equipment configurations and/or field application conditions may produce variances in final system values.		

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

Coverage Rates- Theoretical square feet per gallon

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

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

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 bag and add to mixing pail. Mix contents of part 'A' and part 'B' using a Jiffy type mixer until thoroughly mixed.

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

Surface Preparation & Installation- Surface must be clean and free from contaminants. Concrete surfaces must be prepared according to SSPC-SP13/NACE No.6/ICRI Guideline No. 310.2R-2013. Concrete should be a minimum of 28 days old and have a 5% maximum moisture content as per ASTM F2170 & ASTM F2420. Concrete surfaces must be primed with VF 30 according to manufacturer instructions. Please consult **VersaFlex** for details.

Once the VF 30 primer is tack free, the FE-100 may be applied with a masonry brush or steel trowel to a thickness of approximately 65 mils in one coat or up to 200+ mils as per specification by applying multiple coats to achieve specified thickness. Work the FE-100 into the surface by applying a “scratch coat” with a steel trowel and then finishing in a cross hatch 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 of first application.

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 dry 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.

Clean Up- Cured product may be disposed of without restriction. Excess liquid ‘A’ & ‘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.

Safety- Review SDS at **VersaFlex.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 reach of children

Shelf Life- One year from date of shipment, in original, unopened factory containers, under normal storage conditions of 60°F to 95°F (18°-35°C).

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

VersaFlex Product Manufacturer’s Warranty

During a period of one-year from date of shipping, VersaFlex Incorporated will refund the price of or replace, at its election, product it finds to be defectively manufactured, provided the product has been stored and used properly. Except as expressly stated herein, 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.