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Product Data Sheet

VF 20

(PV 20)

Modified Urethane Primer

Product Description- *VersaFlex VF 20* is a two component isocyanate and castor oil blend primer for porous substrate applications. The low viscosity of **VF 20** allows for maximum penetration of concrete. In hard trowelled concrete situations, **VF 20** may be diluted with up to 1 part acetone to further reduce viscosity. **VF 20** has a working time of 45 minutes. Apply **VF 20** at 2-5 mils allowing product to penetrate the surface of the concrete. Pooling on the surface is to be avoided.

Uses- *VersaFlex VF 20* primer may be used with all *VersaFlex* rapid curing polyurea sealants and spray coatings systems. It is designed for use in both interior and exterior priming situations. Because of **VF 20's** unique chemical composition, it is not necessary for the product to completely cure before applying *VersaFlex* polyurea products.

Ideal for Applications In-

- Primer/Sealer
- Concrete Surfaces
- Chemical Plants
- Industrial Facilities
- Polyurea Coatings
- Epoxy Coatings
- Urethane Coatings

Advantages-

- Low Viscosity
- No VOC's
- 100% Solids
- Odorless
- Penetrating Sealer
- Formulated as a *System* with *VersaFlex* Products
- Eliminates pin-holes
- Applied by Brush, Spray or Roller
- Increase Adhesion to Concrete by up to 3 times.

Physical Properties-

(Typical) 1:1 Mix Ratio		
Cured Film Properties	Test Method	Typical Value
Solids Content		100%
Shore A Hardness	ASTM D2240	85-92
Elongation	ASTM D412	50-60%
Tensile Strength, psi	ASTM D412	1000
Adhesion to Concrete	Elcometer	300-600 psi
Gel Time-Tack Free	Dependant on ambient temperature	45 minutes-2 hours
Working Time*	Dependent on ambient temperature	45 min/200 gm mass

*Do not exceed 45 minutes – material may appear to be workable, but polymerization has exceeded suitable working time.

Limitations- Consult *VersaFlex*.

Coverage Rates-

Theoretical Square Feet Per Gallon

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

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

Packaging-

- One Hundred Ten Gallon Kit: 55 gallons of 'A' side and 55 gallons of 'B' side.- Drum containers filled by weight, volume is closely approximate.
- Ten Gallon Kit: 5 gallons of 'A' side and 5 gallons of 'B' side.

Mixing- VF 20 has a very short work life, especially at temperatures above 60°F. Combining ratio is 1 part A to 1 part B. (**See mixing instructions on container.**) Proportion the amounts carefully and mix for 1 full minute using a wooden stir stick or low speed drill, scraping the bottom and sides of the mixing vessel. Incomplete homogenization will result in improper cure. Because of the speed of the reaction, mix small amounts and do not over mix.

Shelf Life- One year, in original, unopened factory containers, under normal storage conditions of 55°F to 95°F.

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.

Safety- Read Material Safety Data Sheets provided with all shipments. Additional copies are available upon request from **VersaFlex** or your local dealer.

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.
- 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- Concrete should be cured 30 days and be clean, structurally sound and free of wax, dirt, loose paint, curing compounds, and petrochemicals. Random cracks, damaged control joints, and construction joints should be properly prepared prior to application. Air blast or vacuum out the remaining concrete dust prior to installing **VF 20**. All horizontal or vertical concrete or masonry surfaces should be sand blasted or shot blasted. For variations consult **VersaFlex**. **VF 20** should be mixed in manageable quantities and poured out of the mixing pail immediately to extend work time.

The material may be thinned with Acetone or MEK up to 15% to reduce viscosity and extend work time. Allow solvent to completely dissipate prior to overcoating. If using as an aggregate binder, do not thin. Apply with a brush, roller, notched trowel or squeegee.

Technical Services-Sales and Customer Support (800) 870-8842

Warranty- **VersaFlex Incorporated** 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.