



VersaFlex International
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Product Data Sheet

VF 380 (PV 380)

Product Description- *VersaFlex VF 380* is a 100% solids elastomeric polyurea developed for applications such as geotextile lining membranes. **VF 380** is a volatile free, odorless system applied 1:1 mix ratio with plural component spray equipment. Apply at temperatures above -45° F.

Uses- *VersaFlex VF 380* provides less shrinkage with improved elongation characteristics. As a result, **VF 380** makes an excellent polyurea for liners, geotextile coatings, and applications where resilience and durability are required. **VF 380** can be applied at a thickness of 10 to 200 mils in a single application.

Ideal for Applications In-

- Waterproofing Membranes
- Geotextile Coatings
- Foam Coatings
- Flexible Membranes
- Liners
- Metal Parts

Advantages-

- 100% Solids
- 1:1 Mix Ratio by Volume
- Rapid Cure
- Immediate Return to Service
- Excellent Cathodic Disbondment Properties
- Applied by Plural Component Spray
- Odorless
- No VOC's

Physical Properties-

(Typical) 1:1 Mix Ratio		
Cured Film Properties	Test Method	Typical Value
Solids Content		100%
Shore A Hardness	ASTM D2240	80-85
Elongation	ASTM D412	650%
Tensile Strength, psi	ASTM D412	2,500-3,000 psi
Moisture Vapor Transmission	ASTM E-96	0.02 perm
Flexibility	ASTM-D-2794	>160in-lbs
Gel Time		30 seconds
Tack Free		45 seconds

Limitations- **VF 380** should not be used for direct contact with extremely high or low pH attack. Composite systems are available. 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.

Mixing- VF 380 must be spray applied using approved equipment. Use 1:1 ratio pump, with appropriate material heaters, as required for individual application. For information contact **VersaFlex**.

Colors- Standard color is charcoal gray, light gray, or black. Other colors available upon request. Consult **VersaFlex**.

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-

		Test Procedure: ASTM D1308 25°C Exceeds 1 Year	
*Recommended	R	Test Media	
* Recommended Conditionally (washdown within 1 hour of spillage)	C	Acetone	C
*Not Recommended	N	Antifreeze	R
*Suitable for immersion and/or splash and spillage conditions	1	Benzene	R
*Suitable for occasional or intermittent contact for up to 72 hours	2	Benzoic Acid	R
		Butyl Alcohol	R
		Butyl Cellosolve	R
		Carbon Dioxide	R
		Calcium Hypochlorite	N
		Chlorine (5000 ppm in water)	2
Test Procedure: ASTM D3912 25°C Exceeds 1 Year		Citric Acid	R
Test Media		Cylohexanol	R
Acetic Acid 10%	C	Dichloacetic Acid	C
Ammonium Hydroxide 10%/20	R	Dimethyl Formamide	N
Diesel Fuel	R	Ethanol	2
Gasoline	R	Ethylene Glycol	1
Hydraulic Fluid	R	Gasoline	R
Hydrochloric Acid 5%/10%	R	Hexane	R
Methanol	R	Hydraulic Oil	R
Motor Oil	R	Lactic Acid 10%	1
MTBE	R	Methylene Chloride	C
MTBE/Gasoline 5%	R	Methyl Ethyl Ketone	C
NaCl/Water 10%	R	Methanol	R
Phosphoric Acid 10%	R	Mineral Spirits	R
Potassium Hydroxide 10%/20%	R	Monobutyl Ether	R
Sodium Hydroxide 10%/20%/50%	R	Nitric Acid 20%	C
Sugar/Water 10%	R	Phenol	2
Sulfuric Acid 5%/10%	R	Skydrol	2
Skydrol	2	Sodium Bicarbonate	R
Toluene	C	Sodium Chloride	R
Water	R	Sodium Hydroxide 50%	R
2-Methylbutane	R	Sodium Hypochlorite 10%	2
		Stearic Acid	R
		Sulfuric Acid 70%	N
		Trichloroethylene	C
Test Procedure: ASTM B117, after 1000 hours		Trisodium Phosphate	R
<u>Test</u>	<u>Result</u>	Toluene	C
Blistering, Bare Steel	None	Vinegar	R
Corrosion from Scribe,mm	4.0	Xylene	C
Adhesion, psi, Elcometer	>2000		
Note: Applied at 2-mil blast profile, KTA-Tator panels. No primer.			

Preparation and Installation- Regard *VersaFlex* specifications for **VF 380**, for detailed preparation and installation procedures. Substrate priming is not required on all substrates, consult *VersaFlex* for recommendations.

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.