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Product Data Sheet

FSS 50DM™

Spray Polyurea

USGBC LEED, EQ Credit 4:
 Low-emitting VOC Compliant Materials

Product Description- *VersaFlex FSS 50DM* is a fast set, rapid curing, 100% solids, flexible, two-component polyurea elastomer spray coating material. **FSS 50DM** is used by itself or in combination with other materials to produce coatings, liners, wearing courses, and resilient surfaces on metal and other substrates. **FSS 50DM** produces an extremely tough film at all thicknesses. Single or multiple pass applications produce films from 10 mils to 1,000 mils without appreciable sag or runs. **FSS 50DM** may be applied in all positions and to any properly prepared surface. **FSS 50DM** is inert, it will not hydrolyze, leach, or contaminates other materials, and is bondable and paintable. **FSS 50DM** is relatively moisture and temperature insensitive, allowing application in the most problematic ambient conditions.

Uses- *VersaFlex FSS 50DM* is a superior metal coating material designed specifically for industrial applications receiving constant or intermittent attack from contained materials, most corrosive substrates and abrasive action. **FSS 50DM** may be used to coat any properly prepared substrate. **FSS 50DM** is flexible, accommodating to movement of the substrate, yet strong enough to remain intact under all conditions except major structural dislocations. With or without reinforcements, **FSS 50DM** may be used in transitional areas with confidence. **FSS 50DM** may be used in interior or exterior applications. **FSS 50DM** is recommended for repair of other films, may be applied to metal and other substrates, in new construction and in cold weather conditions.

Ideal for Applications in:

- Waterproofing membrane
- Chemical plants
- Food processing facilities
- Liners
- Metal coatings
- Tank linings

Advantages:

- Odorless, no VOC's
- 1:1 mix ratio by volume
- Fast return to service
- Rapid gel time
- Installation temperature range from -40°F to 300°F
- Exposure temperatures -40°F to 350°F, dry

Physical Properties-

<u>Property</u>	<u>Test Method</u>	<u>Typical Value</u>
VOC	Theoretical	0%
Solids Content	Theoretical	100%
Gel Time	ASTM D1640	3 - 7 seconds
Tack Free	ASTM D1640	8 - 12 seconds
Tensile Strength (psi)	ASTM D638	2000 - 2800
Tensile Elongation (%)	ASTM D638	200 - 250
Modulus of Elasticity (psi)	ASTM D638	800 - 1500
Tear Strength (lb/in)	ASTM D624	300 - 450
Shore (D) Hardness	ASTM D2240	50
Taber abrasion, mg wt loss (1000 g, 1000 revs, C-17)	ASTM D4060	15 - 30
Taber abrasion, mg wt loss (1000 g, 1000 revs, H-18)	ASTM D4060	150 - 250
Resistant to Cathodic Disbondment	ASTM G8	Pass

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- **FSS 50DM** 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

*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-

- One Hundred Six Gallon Kit: 53 gallons of 'A' side and 53 gallons of 'B' side. Drum containers filled by weight, volume is closely approximated.

Mixing- FSS 50DM must be spray applied using approved equipment. Use 1:1 ratio pump, with appropriate material heaters as required for individual application.

Colors- View ColorFlex Chart at versaflex.com

Preparation & Installation- Please review the Material Processing & Handling Information for preparation and application procedures. Substrate priming is not required on all metals, consult **VersaFlex** for recommendations. Also, please consult the **VersaFlex** Spray Gun Configuration Recommendation pdf for specific modules and tips.

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 MSDS 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

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 of 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 changes or expenses of any nature incurred without its written consent.