



VersaFlex Incorporated  
 686 S. Adams Street  
 Kansas City, KS 66105  
 913-321-9000  
 913-321-1490 (Fax)

## Product Data Sheet

### FSS 45DC

#### Spray Polyurea

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

**Product Description-** VersaFlex FSS 45DC is a fast set, rapid curing, 100% solids, flexible, two-component polyurea elastomer spray coating material. FSS 45DC is used by itself or in combination with other materials to produce coatings, liners, wearing courses and resilient surfaces on concrete and other substrates. FSS 45DC produces an extremely tough film at all thicknesses. FSS 45DC may be applied in all positions and to any properly prepared substrates. FSS 45DC is inert, it will not hydrolyze, leach, or contaminate other materials, and is bondable and paintable. FSS 45DC is relatively moisture and temperature insensitive, allowing application in the most problematic ambient conditions.

**Uses-** VersaFlex FSS 45DC is a superior concrete and metal coating material designed specifically for industrial applications receiving constant or intermittent attack from contained materials, subsurface hydrostatic pressure, most corrosive substrates and abrasive action. FSS 45DC 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 45DC may be used in transitional areas with confidence. FSS 45DC may be used in interior or exterior applications.

#### Ideal for Applications in:

- Industrial facilities
- Parking garage decks
- Below grade waterproofing
- Above grade waterproofing
- Water & waste water treatment
- Food processing facilities
- Pulp & paper mills
- Bottling & canning facilities
- Walkways & balconies
- Secondary containment

#### Advantages:

- 100% solids, no VOC's
- Odorless, no toxic vapors
- Tough elastomeric membrane
- Excellent thermal stability
- Minimal downtime
- Low permeance rate
- Good resistance to a wide range of chemical attack
- USDA approved
- Installation temperature range from -40°F to 350°F

#### Physical Properties-

<b>(Typical) 1:1 Mix Ratio</b>		
<b>Cured Film Properties</b>	<b>Test Method</b>	<b>Typical Value</b>
Solids content		100%
Gel time		20 – 30 seconds
Tack free		90 seconds
Light traffic		60 – 120 minutes
<b>The following properties are typical after maintaining cured product at 70°F - 77°F for 50 days:</b>		
Tensile strength, psi	ASTM D638	1950 – 2350
Tensile elongation (%)	ASTM D638	450 – 520%
Moisture Vapor transmission, perms	ASTM E96	0.025
Modulus of elasticity (psi)-100%	ASTM D638	960
-300%	ASTM D638	1450
Tear strength, pli, Die C	ASTM D624	430
Shore D hardness	ASTM D2240	45
Tabor abrasion, mg wt loss (1000g, 1000 revs, H-18)	ASTM D4060	180

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 45DC** 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 Ten Gallon Kit: 55 gallons of 'A' side and 55 gallons of 'B' side. Drum containers filled by weight, volume is closely approximated.

**Mixing- FSS 45DC** 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](http://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](http://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 55°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.