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Product Data Sheet

AroStruct® Spray Polyurea

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

Product Description - VersaFlex AroStruct is a fast set, rapid curing, 100% solids, structural, two-component performance modified polyurea spray coating/lining material. Its fast gel time makes it suitable for applications down to -20° F without special conditioning of the component resins and isocyanates. **AroStruct** produces an extremely tough structural film at all thicknesses. **AroStruct** is relatively moisture and temperature insensitive, allowing application in the most problematic ambient conditions.

Uses - VersaFlex AroStruct is a superior coating/lining material designed specifically for industrial applications receiving constant or intermittent attack from contained materials, subsurface hydrostatic pressure, most corrosive substances and abrasive action. **AroStruct** is rigid and strong enough to remain intact under all conditions involving structural integrity. With or without reinforcements, **AroStruct** may be used in transitional areas with confidence. **AroStruct** may be used in interior or exterior applications.

Ideal for Applications In -

- Water & chemical containment
- Industrial Facilities
- Water Treatment
- Food Processing Facilities
- Bottling and Canning Facilities
- Internal Pipe Coating
- Reinforcement Applications (Fiberglass)

Advantages -

- Conforms to AWWA D102 ICS#4
- 100% Solids, No VOC's
- Excellent Thermal Stability
- Enhances Structural Integrity of substrates
- Exposure Temperatures: -40° F-392° F/-40° C-200° C, dry
- Coefficient of Linear Expansion: -40° F-392° F/-40° C-200° C :0.834%
- Generally Suitable for Use when pH ranges from 4 - 11
- Good Resistance to a Wide Range of Chemical Attack
- Non-catalyzed
- Low permeance rate
- Return Project to Service in 60 Minutes
- Odorless, No Toxic Vapors
- USDA Approved

Physical Properties-

Property	Test Method	Typical Value
VOC	Theoretical	0
Solids Content	Theoretical	100%
Gel Time	ASTM D1640	10 -12 seconds
Tack Free	ASTM D1640	~2 minutes
Cured Density	Displacement	0.82 - 0.91
Tensile Strength (psi)	ASTM D638	2,500 - 3,200
Tensile Elongation (%)	ASTM D638	0.5 - 1.2%
Modulus of Elasticity (kpsi)	ASTM D638	100 - 300
Flexural Strength (kpsi)	ASTM D790	9 - 11
Flexural Modulus (kpsi)	ASTM D790	200 - 250
Tear Strength (lb/in)	ASTM D624	120 - 240
Shore (D) Hardness	ASTM D2240	75
Compressive Strength (psi)	ASTM D695	2,600
Taber abrasion, mg wt loss (1000 g, 1000 revs, H-18)	ASTM D4060	140
The following properties are typical after maintaining cured product at 70 – 77°F for 60 days:		
Tensile Strength (psi)	ASTM D638	6,000 - 6,500
Tensile Elongation (%)	ASTM D638	2.5 - 3.5%
Modulus of Elasticity (kpsi)	ASTM D638	200 - 350
Flexural Strength (kpsi)	ASTM D790	10 - 11
Flexural Modulus (kpsi)	ASTM D790	200 - 250
Tear Strength (lb/in)	ASTM D624	200 - 600
Shore (D) Hardness	ASTM D2240	75
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- AroStruct should not be used for direct contact with extremely high or low pH attack.

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

Colors- See ColorFlex chart at www.versaflex.com

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

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.