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Product Data Sheet

AquaVers™ 405 **ANSI/NSF 61.5 Approved** **Spray Polyurea**

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

Product Description- *VersaFlex AquaVers 405* is a fast set, rapid curing, 100% solids, flexible, two-component pure polyurea elastomer spray coating material. **AquaVers 405** is potable water approved in accordance with ANSI/NSF 61.5 barrier material. Its fast gel time makes it suitable for applications down to -20°F without special conditioning of the component resins and isocyanates. **AquaVers 405** produces an extremely tough film at all thicknesses. **AquaVers 405** is relatively moisture and temperature insensitive, allowing application in the most problematic ambient conditions.

Uses- **AquaVers 405** is a superior coating material designed specifically for industrial applications receiving constant or intermittent attack from contained materials, subsurface hydrostatic pressure, most corrosive substances and abrasive action. **AquaVers 405** 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, **AquaVers 405** may be used in transitional areas with confidence. **AquaVers 405** may be used in interior or exterior applications. AquaVers 20 primer and AquaVers 201 aliphatic coating are companion products within our Potable Water Coating package.

Ideal for Applications in:

- Potable water containment
- Industrial facilities
- Water treatment
- Food processing facilities
- Bottling & canning facilities

Advantages:

- Potable water approved in accordance with ANSI/NSF 61.5 barrier material
- Conforms to AWWA D102 ICS#4
- 100% solids, no VOC's
- Flexible, >400% elongation
- Excellent thermal stability
- Heat of deflection 250°F, no load
- Glass transition temperatures -85°F and 450°F
- Generally suitable for use when pH ranges from 4-11
- Good resistance to a wide range of chemical attack
- Non-catalyzed, non-reactive
- Low perm rate, seamless elastomer
- Remains flexible in cold temperatures
- Return project to service in 60 minutes
- Cures from -20°F to 225°F
- Odorless, no toxic vapors
- USDA approved
- Low minimum tank size and no restriction on maximum mil thickness
- Exposure temperature up to 140°F

Physical Properties-

(Typical) 1:1 Mix Ratio		
Cured Film Properties	Test Method	Typical Value
Solids content		100%
Gel time		15 - 25 seconds
Tack free		60 - 90 seconds
Open to traffic		60 minutes
Tensile strength (psi)	ASTM D638	2145
Tensile elongation (%)	ASTM D638	>400%
Modulus of elasticity, (psi)-100%	ASTM D638	960
-300%	ASTM D638	1450
Tear strength, pli, Die C	ASTM D624	405
Shore D hardness	ASTM D2240	40
Moisture Vapor Transmission, perms	ASTM E96	0.025
Taber abrasion, mg wt loss (1000g, 1000 revs, C-17)	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- AquaVers 405 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- AquaVers 405 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 **AquaVers 405** 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 MSDS at [VersaFlex.com](http://www.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.