



Oak Ridge™

Chemical/Equipment



Friendly Foam
Earth friendly..User friendly!

OR405 Data Sheet

Product Description-

OR405 is a fast set, rapid curing, 100% solids, flexible, two-component pure polyurea elastomer spray coating material. **OR405** 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. **OR405** produces an extremely tough film at all thicknesses. **OR405** is relatively moisture and temperature insensitive, allowing application in the most problematic ambient conditions.

Uses-

OR405 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. **OR405** 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, **OR405** may be used in transitional areas with confidence. **OR405** may be used in interior or exterior applications.

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
The following properties are typical after maintaining cured product at 70°F for seven days:		
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-

OR405 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	30	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-

OR405 must be spray applied using approved equipment. Use 1:1 ratio pump with appropriate material heaters, as required for individual application.

Preparation & Installation-

Regard **Coating Holdings LTD** specifications for **OR405** Spray Polyurea for detailed preparation and installation procedures. Substrate priming is not required on all substrates, consult **Coating Holdings LTD** 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-

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 55oF to 95oF (18o-35oC).

Call Coating Holdings LTD for technical questions. 1-800-625-9577.

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Suppliers of High performance Foam/Coating and application Equipment

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