



PolyVers International
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Product Data Sheet

PV 320 **Spray Polyurea**

Product Description- *PolyVers PV 320* is a fast set, rapid curing, 100% solids, flexible, two-component polyurea elastomer spray coating material. **PV 320** is used by itself or in combination with other materials to produce coatings, liners, wearing courses, and resilient surfaces on metal and other substrates. Its extremely fast gel time makes it suitable for applications down to -20°F without special conditioning of the component resins and isocyanates. **PV 320** produces an extremely tough film at all thicknesses. Single or multiple pass applications produce films from 10 mils to 1000 mils without appreciable sag or runs. **PV 320** may be applied in all positions and to any suitably prepared substrate. **PV 320** is inert, it will not hydrolyze, leach, or contaminate other materials, and is bondable and paintable. **PV 320** is relatively moisture and temperature insensitive, allowing application in the most problematic ambient conditions.

Uses- *PolyVers PV 320* is a superior metal coating material designed specifically for industrial applications receiving constant or intermittent attack from contained materials, most corrosive substances, and abrasive action. **PV 320** may be used to coat any suitably prepared substrate. **PV 320** is flexible, accommodating movement of the substrate, yet strong enough to remain intact under all conditions except major structural dislocations. With or without reinforcements **PV 320** may be used in transitional areas with confidence. **PV 320** may be used in interior or exterior applications. **PV 320** 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 Membranes
- Chemical Plants
- Foam Coatings
- Flexible Membranes
- Secondary Containment
- Liners
- Metal Parts
- Tank Linings
- Flooring

Advantages-

- 100% Solids
- 1:1 Mix Ratio by Volume
- Rapid Cure
- Immediate Return to Service
- Applied by Plural Component Spray
- Odorless, No VOC's
- Temperature Range from -20 °F to 300 °F
- Minimal Downtime

Physical Properties-

(Typical) 1:1 Mix Ratio		
Cured Film Properties	Test Method	Typical Value
Solids Content		100%
Shore D Hardness	ASTM D2240	55
Elongation	ASTM D412	200-275%
Tensile Strength, psi	ASTM D412	2,500-3,000 psi
Tear Strength	ASTM 642C	480 pli
Moisture Vapor Transmission	ASTM E-96	0.02 perm
Abrasion Resistance, weight loss	ASTM D-1630	125 mg
Gel Time		10 sec
Tack Free		15 sec

Limitations- PV 320 should not be used for direct contact with extremely high or low pH attack. Composite systems are available. Consult **PolyVers**.

Coverage Rates-

Theoretical Square Feet Per Gallon

Mils	10	15	50	60	80	100	125
	160	107	32	27	20	16	13

Note: 1604 mil inches per gallon. Totally dependent on substrate texture and condition.

Packaging-

- **Drum Kits:** 53 gallons of 'A' side and 53 gallons of 'B' side.- Drum containers filled by weight, volume is closely approximate.

Mixing- PV 320 must be spray applied using approved equipment. Use 1:1 ratio pump, with appropriate material heaters, as required for individual application. For information contact **PolyVers**.

Colors- Standard color is charcoal gray, light gray, or black. Other colors available upon request. Consult **PolyVers**.

Shelf Life- One year, in original, unopened factory containers, under normal storage conditions of 55°F to 95°F.

Clean Up- Cured product may be disposed of without restriction. Excess liquid 'A' and '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- Read Material Safety Data Sheets provided with all shipments. Additional copies are available upon request from **PolyVers** or your local dealer.

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.
- Do not use near high heat or open flame.
- Do not take internally.
- Keep out of the reach of children.

Chemical Resistance-

<p>*Recommended</p> <p>* Recommended Conditionally (washdown within 1 hour of spillage)</p> <p>*Not Recommended</p> <p>*Suitable for immersion and/or splash and spillage conditions</p> <p>*Suitable for occasional or intermittent contact for up to 72 hours</p> <p>Test Procedure: ASTM D3912 25°C Exceeds 1 Year</p> <p>Test Media</p> <p>Acetic Acid 10%</p> <p>Ammonium Hydroxide 10%/20</p> <p>Diesel Fuel</p> <p>Gasoline</p> <p>Hydraulic Fluid</p> <p>Hydrochloric Acid 5%/10%</p> <p>Methanol</p> <p>Motor Oil</p> <p>MTBE</p> <p>MTBE/Gasoline 5%</p> <p>NaCl/Water 10%</p> <p>Phosphoric Acid 10%</p> <p>Potassium Hydroxide 10%/20%</p> <p>Sodium Hydroxide 10%/20%/50%</p> <p>Sugar/Water 10%</p> <p>Sulfuric Acid 5%/10%</p> <p>Skydrol</p> <p>Toluene</p> <p>Water</p> <p>2-Methylbutane</p> <p>Test Procedure: ASTM B117, after 1000 hours</p> <p><u>Test</u></p> <p>Blistering, Bare Steel</p> <p>Corrosion from Scribe,mm</p> <p>Adhesion, psi, Elcometer</p> <p>Note: Applied at 2-mil blast profile, KTA-Tator panels. No primer.</p>	R	Test Procedure: ASTM D1308 25°C Exceeds 1 Year	
			Test Media
	C	Acetone	C
	R	Antifreeze	R
	N	Benzene	R
	1	Benzoic Acid	R
		Butyl Alcohol	R
	2	Butyl Cellosolve	R
		Carbon Dioxide	R
		Calcium Hypochlorite	N
		Chlorine (5000 ppm in water)	2
		Citric Acid	R
		Cylohexanol	R
	C	Dichloacetic Acid	C
	R	Dimethyl Formamide	N
	R	Ethanol	2
	R	Ethylene Glycol	1
	R	Gasoline	R
	R	Hexane	R
	R	Hydraulic Oil	R
	R	Lactic Acid 10%	1
	R	Methylene Chloride	C
	R	Methyl Ethyl Ketone	C
	R	Methanol	R
	R	Mineral Spirits	R
	R	Monobutyl Ether	R
	R	Nitric Acid 20%	C
	R	Phenol	2
	R	Skydrol	2
	2	Sodium Bicarbonate	R
	C	Sodium Chloride	R
	R	Sodium Hydroxide 50%	R
	R	Sodium Hypochlorite 10%	2
		Stearic Acid	R
		Sulfuric Acid 70%	N
		Trichloroethylene	C
	<u>Result</u>	Trisodium Phosphate	R
		Toluene	C
		Vinegar	R
		Xylene	C

Preparation and Installation- Regard **PolyVers** specifications for **PV 320**, for detailed preparation and installation procedures. Substrate priming is not required on all substrates, consult **PolyVers** for recommendations.

Technical Services-Sales and Customer Support (800) 870-8842

Warranty- **PolyVers International** 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 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.