



PolyVers International
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Product Data Sheet

PV 42 D

(VF FSS 42 D)

Aliphatic Spray

Product Description- *PolyVers PV 42 D* is a 100% solids, flexible, two component modified aliphatic elastomer spray applied coating material. **PV 42 D** is autocatalytic, containing no solvents, hardeners, or diluents. **PV 42 D** is used by itself or in combination with other materials to produce coatings and liners on concrete or metal substrates. Its composition makes it suitable for applications requiring color stability. **PV 42 D** produces an extremely tough film at any thickness. **PV 42 D** may be applied in all positions to any suitably prepared substrate.

Uses- *PolyVers PV 42 D* is a superior coating material designed specifically for industrial and commercial applications receiving constant or intermittent exposure to ultraviolet light. **PV 42 D** 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 42 D** may be used in transitional areas with confidence. **PV 42 D** may be used in interior or exterior applications.

Ideal for Applications In-

- Industrial Facilities
- Parking Garage Decks
- Walkways and Balconies
- Manufacturing Facilities
- Water and Waste Water Treatment
- Food Processing Facilities
- Bottling and Canning Facilities
- Pools and Fountains

Advantages-

- **100% Solids, No VOC's**
- USDA Approved for incidental food contact
- Installation Temperatures -34°C (-30°F) to 52°C (125°F)
- Working Temperatures -40°C (-40°F) to 52°C (125°F).

Physical Properties-

Property	Test Method	Typical Value
VOC	ASTM D3960	Zero
Solids Content		100%
Gel Time		<1 Minute
Tack Free		~2 minutes
Initial Physical Integrity		48 Hours
The following properties are typical after maintaining cured product at 70 – 77°F for seven days:		
Tensile Strength (psi)	ASTM D638	1500 – 2000
Tensile Elongation (%)	ASTM D638	225 – 500
Tear Strength (lb/in)	ASTM D624	375 – 425
Shore (D) Hardness	ASTM D2240	≥ 42
Taber abrasion, mg wt loss (1000 g, 1000 revs, H-18)	ASTM D4060	135 – 165

Chemical Resistance-

ASTM D3912 - modified 7 day immersion exposure			
The information in this chart is intended only as a guide. This information has been compiled from various sources believed to be reliable. To verify compatibility or suitability of this product in specific applications, the product should be tested under the specific service conditions. The ratings are for resistance at 25°C (77°F) unless otherwise noted.			
No visible damage	4 - less than 1% change		
Slight Swelling	3 - 1% to 3% weight gain		
Swelling	2 - 3% weight gain		
Failure	1 - unable to weigh		
Test Media:	Result:	Motor Oil	4
Acetic Acid, 10%	4	MTBE	1
Acetone	2	MTBE (5%)/gasoline	2
Ammonium Hydroxide, 20%	4	Muriatic Acid (10% HCL)	4
Antifreeze/Water	2	NaCl (10%)/water	4
Brake Fluid (DOT 3)	1	Phosphoric Acid (10%)	4
Clorox 10%/water	4	Potassium Hydroxide (10%)	4
Diesel Fuel	3	Skydrol	2
Gasoline	3	Sodium Hydroxide (20%)	4
Hydrochloric Acid (10%)	4	Sodium Bicarbonate	4
Hydrofluoric Acid (10%)	1	Sugar/Water	4
Hydraulic Fluid	4	Sulfuric Acid (10%)	4
Isopropyl Alcohol	4	Sulfuric Acid (31%)	1
Lactic Acid	3	Toluene	2
MEK	2	Vinegar (5%)/water	4
Methanol	3	Water (180° F)	4

Limitations- Requires dry substrate. 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-

- One Hundred Ten Gallon Kit: 55 gallons of 'A' side and 55 gallons of 'B' side.- Drum containers filled by weight, volume is closely approximate.

Mixing- PV 42 D must be spray applied using approved equipment. Use 1:1 ratio pump, with or without appropriate material heaters, as required for individual application. For information contact **PolyVers**.

Colors- Consult **PolyVers**

Shelf Life- One year, in original, unopened factory containers, under normal storage conditions of 13°C (55°F) to 35°C (95°F). Protect from freezing.

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.

Preparation and Installation-

1. This product requires a dry substrate.
2. Priming is not required when overcoating aromatic polyurea. Overcoat within 4 hours.
3. Concrete substrates should be clean, sound, and dry. Prime concrete less than 30 days old with **PW-1** applied at 300-400 square feet per gallon.
4. Metal substrates should have a 3-5 mil blast profile and should be primed with **PW-1** applied at 500 square feet per gallon.
5. For standard polyurea high pressure plural component spray applications install at application temperatures from 60°C (140°F) to 71°C (160°F), at application pressures between 1500 - 1600 psi.

Technical Services-Sales and Customer Support (913) 321-9000

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.