



PolyVers International  
 87 Shawnee Avenue  
 Kansas City, KS 66105  
 (913) 321-9000  
 (913) 321-1490 (fax)

# Product Data Sheet

## PV 31

### (VF 31)

### Epoxy Primer

**Product Description - PolyVers PV 31** is a low viscosity, 100% solids epoxy developed as a penetrating concrete primer for polyurea applications. **PV 31** penetrates and strengthens the surface of the concrete, reduces pin-hole formations and provides a chemically reactive surface to accept **PolyVers Polyurea**. Adhesion is increased with the use of **PV 31** up to three times that of unprimed concrete.

**Uses - PolyVers PV 31** epoxy primer may be used with all **PolyVers** rapid curing polyurea sealants and spray coatings systems. It is designed for use in both interior and exterior priming situations. **PV 31** may also be used as a damp surface primer. **PV 31** provides excellent properties at temperature 10°C (50°F) and above.

#### Ideal for Applications In -

- Primer/Sealer
- Concrete Surfaces
- Chemical Plants
- Industrial Facilities
- Polyurea Coatings
- Epoxy Coatings
- Urethane Coatings

#### Advantages -

- Low Viscosity
- No VOC's
- 100% Solids
- Odorless
- Penetrating Sealer
- Formulated as a *System* with **PolyVers** Products
- Reduces pin-holes
- Applied by Brush, Spray or Roller
- Increases Adhesion to Concrete by up to 3 times

#### Physical Properties -

(Typical) 1:1 Mix Ratio		
<u>Cured Film Properties</u>	<u>Test Method</u>	<u>Typical Value</u>
Solids Content		100%
Shore D Hardness	ASTM D2240	50-60
Elongation	ASTM D412	10%
Tensile Strength, psi	ASTM D412	2000
Adhesion to Concrete	Elcometer	300-600 psi
Gel Time	Dependant on ambient temperature	10-16 hours/2-3 mils
Pot Life	Dependent on ambient temperature	15-30 min/200 gm mass
Dry Time	Dependent on ambient temperature	2 – 4 Hours

#### Coverage Rates -

Theoretical Square Feet Per Gallon

Mils	10	15	50	60	80	100	125
Sq. Ft.	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.
- Ten Gallon Kit: 5 gallons of 'A' side and 5 gallons of 'B' side.
- Two Gallon Kit 1 gallon of 'A' side and 1 gallon of 'B' side.

**Mixing - PV 31** has a very short work life, especially at temperatures above 16°C (60°F). Combining ratio is 1 part 'A' to 1 part 'B'. (**See mixing instructions on container**) Proportion the amounts carefully and mix for 1 full minute using a wooden stir stick or low speed drill, scraping the bottom and sides of the mixing vessel. Incomplete homogenization will result in improper cure. Because of the speed of the reaction, mix small amounts and do not over mix.

**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 before using. Available at [Polyvers.com](http://Polyvers.com)

Basic safety for personal protection is:

- Long-sleeve overalls or disposable Tyvex overalls
- Rubber gloves
- Respirator
- 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** – Concrete should be cured 30 days, clean, structurally sound, free of wax, dirt, loose paint, curing compounds, and petrochemicals. Random cracks, damaged control joints, and construction joints should be properly prepared prior to application. Air blast or vacuum out the remaining concrete dust prior to installing **PV 31**. All horizontal or vertical concrete or masonry surfaces should be sand blasted or shot blasted.

Depending on surface porosity of surface, apply at 400-500 square feet per gallon. Apply with a brush, roller, notched trowel or squeegee.

## 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.