



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

Product Data Sheet

PV 105 Industrial & Chemical Resistant Epoxy

Product Description – PolyVers PV105 is a bisphenol F epoxy concrete coating that offers an economical and highly serviceable coating for areas subject to harsh chemical exposure. **PV 105** is self-priming and semi-leveling two-component epoxy that is typically sprayed. It is formulated to withstand the most aggressive industrial exposures, including high concentrations of sulfuric acid, as well as many organic chemicals and solvents.

Uses - PolyVers PV 105 is an excellent bisphenol F epoxy for industrial areas with extreme exposures, but where affordability is a requirement. **PV 105** is designed to offer chemical resistance and protective coating for concrete structures that experience heavy wear, abuse and chemical attack.

Ideal for Applications In -

- Process Slabs
- Chemical Loading and Unloading Areas
- Spill Containment Areas
- Waste-Proofing
- Battery Recycling and Recharging Stations

Advantages -

- Low Permeability
- 100% solid
- Excellent resistance to:
 - Wear and Impact
 - Thermal Shock
 - Cracking
- High Cohesive Strength and Flexibility
- Economical
- Excellent Chemical Resistance

Physical Properties -

| | | |
|----------------------|-------------|---------------------------------|
| Solids by Volume | Volume | 100% |
| Pot Life | 24°C (75°F) | 30-45 minutes |
| Cure Time | 24°C (75°F) | Foot Traffic: 12 hrs |
| | | Light Vehicular Traffic: 24 hrs |
| | | Chemical Service: 36 hrs |
| Hardness | ASTM D-2240 | 68-72 Shore D |
| Compressive Strength | ASTM C-579 | 12,000 psi |
| Flexural Strength | ASTM D-790 | 10,000 psi |
| Tensile Strength | ASTM D-638 | 4,500 psi |
| Elongation | ASTM D-638 | 6% |
| Permeability | ASTM E-96 | 0.006 perm |

Application Guidelines -

TEMPERATURE CONSIDERATIONS-

1. Throughout the application process the surface temperature should remain above 10°C (50°F).
2. Store all materials at 21°C (70°F) - 29°C (85°F) for at least 24 hours prior to use.

SURFACE PREPARATION OF CONCRETE -

1. Surface must be free of dirt, dust, oil, grease, chemical and other contaminants immediately prior to applying **PV 105**
2. New concrete should be cured a minimum of 28 days.
3. Concrete must be structurally sound and must not contain any accelerators or curing compounds.
4. Remove all surface laitance and expose sound concrete. Abrasive blasting is recommended.
5. Any existing coating should be completely removed.
6. Honeycomb and form voids on vertical surfaces may be filled using VersaGrout 100 or 200.

PRIMING -

PolyVers PV 105 can act as a self priming coating or in conjunction with a **PolyVers** primer. The use of a primer such as the PV 30 or PV31 is recommended. Refer to the data sheet for further application information. When using the **PV 105** as a self priming coating, apply a thin 5-10 mil coating and follow the same procedures and guidelines as described within.

APPLICATION EQUIPMENT -

PolyVers PV 105 may be applied using a single component airless sprayer, 4 to 1 plural component proportioner, brush or roller. Contact **PolyVers** for further equipment recommendation and set up.

MIXING AND APPLICATION -

1. The A and B Components should be pre-mixed immediately prior to use.
Part A - Blend to a uniform consistency in its own container using a jiffy type mixer.
Part B - Stir each component in its own container to a uniform color.
2. If using a plural component proportioner, follow equipment manufacturer recommendation for equipment operations.
3. If using a single component airless sprayer or roller:
Pour the entire contents of Part B into the container holding Part A and mix thoroughly for two minutes with a jiffy type mixer.
The pot life of the mixture will be approximately 30-45 minutes @ 24°C (75°F); elevated temperatures and extended time in the bucket will shorten the pot life.
4. If self priming apply a 5-10 mil coat.
5. If applying as a coating thickness can be up to 20 mils. For thicker films, additional coats are needed.
6. To prepare the coating for intercoat adhesion:
Allow **PV 105** to cure until gelled.
If the surface cures firm to the touch, but it is less than 24 hours, it **MUST** be washed with soap and water, rinsed, and dried before recoating.
Surface cured beyond 24 hours **MUST** be washed with soap and water, rinsed, dried, and lightly sanded or abrasive blasted.

Packaging - PV 105 is available in 1, 5 & 25 gallon kits. Each kit comes with a premeasured Part A and Part B component. Contact **PolyVers** for vertical applications.

Storage and Shelf Life - Keep **PV105** components in their original containers, tightly sealed. When stored at 10°C (50°F) – 24°C (75°F) out of direct sunlight **PV 105** has a shelf life of one year.

Clean Up - PV 105 may be removed from tools and equipment using xylene or MEK.

Safety -

FOR INDUSTRIAL USE ONLY.

Avoid contact with eyes and skin. Do not ingest or inhale

When working with **PV 105** always wear chemical goggles, rubber gloves, and appropriate work clothes.

Prolonged or repeated exposure to **PV 105** may cause skin irritation or allergic reactions.

Refer to the MSDS regarding individual components, additional safety precautions and proper clean up procedures.

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.