

## POLYMER NATION CHEMICAL COMPANY, LLC

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Setting the Standard

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### TECHNICAL DATA SHEET: P-30 EPOXY GROUTING/PRIMER

#### **Product Overview**

P-30 consist of a high viscosity, nonylphenol-free, epoxy resin and a thickened, cycloaliphatic amine reactant. This combination achieves a rheology that makes it easy to spread but also fast to return to its resting state, especially in vertical applications.

#### **Uses and Benefits**

P-30 is most often used to fill porous surfaces such as trowel applied epoxy flooring and coving and as a concrete block filler. It can also be used as a troweling paste to assist in the application of aggregate-filled mortar on coving and vertical substrates.

#### Limitations

P-30 is designed to be applied between 12-20 mils. It is not intended to be used as a finish coat as it will amber. Cooler temperatures will increase cure times. Warmer temperatures will decrease working and cure times. Verify that substrate temperature is above 5 degrees of dewpoint during application and cure of material to avoid a potential amine blush.

#### **Surface Preparation**

The preparation method for each project is determined by a full understanding of the substrate to be coated, the chemistry of the coating system being used, the coating system thickness, and numerous other factors. The coating installer should fully read and understand ICRI Guideline NO.03732 and OSHA 29 CFR 1926.1153 before starting preparatory work. The aim, of preparing a substrate for coating applications, is to roughen the surface, remove weak layers, contaminants, dirt, debris and present a solid, clean, dry substrate for the primer. If unsure as to the level of preparation needed contact Polymer Nation at Lab@polymerNation.com.

#### Mixing

It is always recommended to mix the entire kit, whenever possible, to avoid off-ratio mixtures. Mix ratio is 2 parts P-30 Part A to 1 part P-30 Part B. Combine all of part A and B into a single container, large enough to except the entire kit. Mix using a 350 RPM mixer using an appropriate mixing blade for 2 - 3 minutes making sure to not introduce excessive air into the material.

#### **Application**

If using as a block filler- pour content into a large rolling pan and roll with a 9" wide, 5/8" nap roller cover. If using as a grout coat, pour the entire content from the container onto the floor and using a non-marking, flat squeegee. Apply even pressure to force material into the pores and cavities being careful not to leave tails that will need to be removed once cured. Recoat within 24 hours. Clean tools with a solvent similar to Xylene or Acetone.

#### **Technical Data**

The data below was gathered at temperatures of 72-75°F and 30-50% RH

| Dackaging               | 2 Callon kits                |  |
|-------------------------|------------------------------|--|
| Packaging               | 3 Gallon kits                |  |
| Mix Ratio by Volume     | 2:1                          |  |
| Mixed Viscosity         | 4500 +/- 500 cP 25°C/77°F    |  |
| Gel Time                | 45 minutes                   |  |
| Dry to Touch            | 4-6 hours                    |  |
| Through Dry             | 8-10 hours                   |  |
| Dry to Walk             | 12-16 hours                  |  |
| Dry to Light Use        | 24 hours                     |  |
| Full Cure               | 7 days                       |  |
| Shore D Hardness        | D65 @ 24 hours               |  |
| Shore D Hardness        | D78 @ 7 days                 |  |
| Gloss @ 60 Degree Angle | 60-70                        |  |
| VOC's of Mixed Material | <50 g/l EPA Method 24        |  |
| Color Scale             | 0.5-1.0 per ASTM D1500       |  |
| Solids by Volume Mixed  | 100%                         |  |
| Application in Mils     | 12-20 (80 – 135 sq.ft./gal.) |  |
| Available Colors        | Clear                        |  |

# PHYSICAL PROPERTIES P-30 EPOXY GROUTING/PRIMER

| Description   | Standard    | Results   |
|---|-------------|---|
| Tensile Strength  | ASTM C307   | 10,400 psi  |
| Moisture Absorption                                     | ASTM C413   | <.2 weight increase   |
| Coefficient of Thermal Lineal Expansion                 | ASTM C531   | 15-17 x 10-6 27-30 x 10-6   |
| Compressive Strength                                    | ASTM C579   | 11,700 psi  |
| Modulus of Elasticity                                   | ASTM C580   | N/A   |
| Flexural Strength                                       | ASTM C580   | 5,550 psi   |
| Water Vapor Transmission                                | ASTM D1653  | See ASTM D3010  |
| Impact Resistance                                       | ASTM D2794  | >96 inch pounds   |
| Independent Certificate from third party testing agency | ASTM D3010  | N/A   |
| Adhesion  | ASTM D3359  | 5A  |
| Abrasion Resistance CS17 1000 g<br>1000cycles in g Loss | ASTM D4060  | 0.073g Loss (when higher abrasion resistance is required the addition of PC 1336 to the coating should be included) |
| Adhesion to Steel                                       | ASTM D4541  | >1,000 psi  |
| Hiding Power  | ASTM D5150  | 2-5/225   |
| Flammability When Adhered to Concrete                   | ASTM D635   | Self-Extinguishing  |
| Adhesion to Concrete                                    | ASTM D7234  | >450 Substrate failure  |
| Coefficient of Friction Dry Ave. three tests            | NFSI B101.0 | N/A   |
| Coefficient of Friction Wet Ave. three tests            | NFSI B101.1 | N/A   |
| Accelerated Weathering Testing                          | ASTM G154   | Significant yellowing   |

<sup>\*</sup> Dispose of material, containers, solvents, etc., per Federal, State and local guideline, rules and laws.

Test data has been gathered from testing conducted by independent, internal and third party testing. The best way to compare coating performance is by head-to-head independent testing as this removes the numerous variables found between testing standards, equipment and testing agencies.

<sup>\*</sup> Store material between 60-80 degrees F in a protected dry location.