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# POLYMER NATION CHEMICAL COMPANY, LLC

*Setting the Standard*

847-774-5038 | [www.polymernation.com](http://www.polymernation.com) | [sales@polymernation.com](mailto:sales@polymernation.com)



405 Oakwood Ave  
Waukegan, IL 60085

## TECHNICAL DATA SHEET: P-03 2K WB EPOXY PRIMER

### Product Overview

P-03 is a two component, low VOC, waterborne epoxy primer/sealer. It has excellent adhesion to dry or damp concrete (up to 95% RH), provides fast dry and early hardness properties and can be applied clear or tinted using 1342 color packs. P-03 is easy to use and provides a high gloss that resists abrasion and a broad range of common chemicals.

### Uses and Benefits

P-03 is most often used as a concrete floor primer/sealer but can also be used as a vertical primer on concrete and wallboard. It has a low mix viscosity, is blush resistant and has virtually no odor. It is easy to apply and provides an excellent stand-alone coating or a base layer for subsequent coatings of all types.

### Limitations

P-03 is designed to be applied between 4-8 mils. Ideal application temperatures to be between 60 – 90°F. Cooler temperatures will increase cure times. Warmer temperatures will decrease working and cure times. Higher relative humidity will increase cure time on waterborne products.

### 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. 310.2R-2013 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](mailto:Lab@polymerNation.com).

### Mixing

It is always recommended to mix the entire kit, whenever possible, to avoid off-ratio mixtures. 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

Pour entire content of mixed material onto the floor in ribbons. Spread material using a 5-7 mil squeegee at a rate of 200-400 sf per gallon. Back roll material using a 3/8" nap roller cover to maintain an even mil thickness of material. A

bucket roll method can be used on smaller projects. Recoat within 24 hours.

### Technical Data

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

Packaging	2.5 Gallon kits
Mix Ratio by Volume	1:4 (A:B)
Mixed Viscosity	300-500 cP 25°C/77°F
Working Time	45-60 minutes
Dry to Touch	4-5 hours
Through Dry	6-12 hours
Dry to Light Use	18-24 hours
Full Cure	7 days
Pendulum (König) Hardness	20 @ 24 hours
Pendulum (König) Hardness	40 @ 7 days
Gloss @ 60 Degree Angle	60-80
VOC's of Mixed Material	<50 g/l EPA Method 24
Color Scale	1 per ASTM D1500
Solids Mixed	65%
Application in Mils	4-8 (200-400 sq. ft./gal)
Available Colors	Clear and Color Packs (PN 1342 WB Color Packs)

## PHYSICAL PROPERTIES P-03 2K WATERBORNE EPOXY PRIMER

Description	Standard	Results
Tensile Strength	ASTM C307	2,500 psi
Moisture Absorption	ASTM C413	<.21 weight increase
Coefficient of Thermal Lineal Expansion	ASTM C531	N/A
Compressive Strength	ASTM C579	N/A
Modulus of Elasticity	ASTM C580	N/A
Flexural Strength	ASTM C580	4,800 psi
Water Vapor Transmission	ASTM D1653	See ASTM D3010
Impact Resistance	ASTM D2794	>96 inch pounds
Adhesion	ASTM D3359	5A
Abrasion Resistance CS17 1000 g Load 1000 cycles	ASTM D4060	0.083g 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	2-5/250
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	0.7
Coefficient of Friction Wet Ave. three tests	NFSI B101.1	0.65
Accelerated Weathering Testing	ASTM G154	Moderate yellowing

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

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

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.

The information here is general information to help our customers determine whether our products suit their specific applications. Our products are intended for sale to commercial and industrial customers. We require that customers inspect and test our products before use to satisfy themselves as to the content and suitability for the applications they intend to use our products. Nothing herein shall constitute any warranty expressed or implied, including any warranty of merchantability or fitness for a particular purpose, nor is any protection from any law or patent to be inferred. The exclusive remedy for all proven claims is the replacement of our materials, and we shall not be liable for incidental or consequential damages. Polymer Nation Chemical Company LLC, 405 Oakwood Ave. Waukegan, IL 60085. All rights reserved.