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EPOXIES

P-03

TECHNICAL DATA SHEET

COMPONENTS	SOLIDS	VOC	MIX RATIO
2	65%	<50 g/l	1:4

DESCRIPTION

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.

RECOMMENDED USES

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.

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.

COMPONENTS

Part A

Part B

GENERAL PRODUCT INFORMATION

Chemistry	Epoxies
Color / Finish	High-Gloss · Clear and Color Packs
Number of Components	2
Solids by Volume	65%
VOC (Mixed)	<50 g/l
Mix Ratio	1:4
Mixed Viscosity	300-500 cP 25°C/77°F
Gel / Working Time	45-60 minutes
Application Temperature	60 – 90°F
Odor	Subtle

Solids Mixed

Warmer temperatures will reduce viscosity and lower temperatures will increase viscosity

Data gathered at temperatures of 72-75°F and 30-50% RH

PHYSICAL PROPERTIES

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

Hardness	20 @ 24 hours / 40 @ 7 days	Pendulum (König) Hardness
Tensile Strength	2,500 psi	ASTM C307
Compressive Strength	N/A	ASTM C579
Flexural Strength	4,800 psi	ASTM C580
Abrasion — Taber CS-17	0.083g Loss	ASTM D4060
Impact Resistance	>96 inch pounds	ASTM D2794
Adhesion to Concrete	>450 Substrate failure	ASTM D7234
Gloss @ 60°	60-80	
Color Scale	"1 per ASTM D1500" with note "Clear to slightly amber before colorants are introduced"	ASTM D1500
Accelerated Weathering	Moderate yellowing	ASTM G154
Moisture Absorption	<.21 weight increase	ASTM C413
Coefficient of Thermal Lineal Expansion	N/A	ASTM C531
Water Vapor Transmission	See ASTM D3010	ASTM D1653
Adhesion	5A	ASTM D3359
Adhesion to Steel	>1,000 psi	ASTM D4541
Hiding Power	2-5/250	ASTM D5150
Flammability When Adhered to Concrete	Self-Extinguishing	ASTM D635
Coefficient of Friction — Dry	0.7	NFSI B101.0
Coefficient of Friction — Wet	0.65	NFSI B101.1

ASTM D4060 — Abrasion Resistance CS17, 1000 g Load 1000 cycles. When higher abrasion resistance is required the addition of PC 1336 to the coating should be included.

Applying material close to dew point will decrease gloss and may result in an amine blush

1 per ASTM D1500; clear to slightly amber before colorants are introduced

CURE SCHEDULE

Dry to Touch	4-5 hours
Through Dry	6-12 hours
Dry to Light Use	18-24 hours
Full Cure	7 days

COVERAGE & PACKAGING

Coverage Rate	200-400 sq. ft./gal
Application Thickness	4-8 mils
Recoat Window	Within 24 hours
Packaging	2.5 Gallon kits

STORAGE, HANDLING & SAFETY

Store at 60F-80F. Store material between 60-80 degrees F in a protected dry location. Refer to the current Safety Data Sheet (SDS) for this product before handling, mixing, or applying. Use appropriate personal protective equipment and ensure adequate ventilation during application and cure. Dispose of material, containers, solvents, etc., per Federal, State and local guideline, rules and laws.

TEST DATA

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.

TYPICAL VALUES

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.