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WALL PRODUCTS

W-80

TECHNICAL DATA SHEET

COMPONENTS	SOLIDS	VOC	MIX RATIO
2	100%	<50 g/l	2:1

DESCRIPTION

W-80 consists of a pigmented, 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.

RECOMMENDED USES

W-80 is most often used to coat vertical substrates that require a high-build, high-performance, material that will not run or sag. It can also be used as a 1-coat line striping material, pigmented grout coat on aggregate-filled mortar and coving and as a base and saturant coat for imbedding fiberglass and carbon-fiber sheeting.

LIMITATIONS

W-80 is designed to be applied between 8-20 mils depending on the porosity of substrate. Ideal application temperatures to be between 60-90°F. 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. 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. Mix ratio is 2 parts W-80 Part A to 1 part W-80 Part B. Combine all of part A and B into a single container, large enough to accept the entire kit. Mix at 350 RPM for 2-3 minutes using an appropriate mixing blade. Make sure to scrape any unmixed material off the sides of the mix vessel. Take care not to introduce excessive air during mixing.

APPLICATION

Pour mixed content into a large rolling pan, if rolling vertically, and roll with a 9" wide, 5/8" nap roller cover. If using as a floor coating or grout-coat, pour material onto the floor and squeegee, making sure to apply even pressure so as to force material into the pores and cavities. Backroll as needed to even out application. Recoat within 24 hours. Clean tools with a solvent similar to Xylene or Acetone.

COMPONENTS

Part A

COMING SOON

Part B

GENERAL PRODUCT INFORMATION

Chemistry	Wall Products
Color / Finish	White, Light Gray and Warm Sun, Safety Yellow
Number of Components	2
Solids by Volume	100%
VOC (Mixed)	<50 g/l
Mix Ratio	2:1
Mixed Viscosity	4800 cP
Gel / Working Time	30-45 minutes
Gel Time	50 min.
Application Temperature	60-90°F
Odor	Very Subtle

1-2 gallon container of Part A and 1-1 gallon container of Part B

Mixed

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

PHYSICAL PROPERTIES

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

Hardness	D65 @ 24 hours / D78 @ 7 days	Shore D
Tensile Strength	10,400 psi	ASTM C307
Compressive Strength	11,700 psi	ASTM C579
Flexural Strength	5,550 psi	ASTM C580
Abrasion — Taber CS-17	0.073g Loss (when higher abrasion resistance is required the addition of PC 1336 to the coating should be included)	ASTM D4060
Impact Resistance	>96 inch pounds	ASTM D2794
Adhesion to Concrete	>450 Substrate failure	ASTM D7234
Gloss @ 60°	85-90	
Color Scale	0.5-1.0	ASTM D1500
Accelerated Weathering	Moderate yellowing	ASTM G154
Moisture Absorption	<.2 weight increase	ASTM C413
Coefficient of Thermal Lineal Expansion	15-17 x 10-6 27-30 x 10-6	ASTM C531
Water Vapor Transmission	See ASTM D3010	ASTM D1653
Independent Certificate — Third-Party Testing	N/A	ASTM D3010
Adhesion	5A	ASTM D3359
Adhesion to Steel	>1,000 psi	ASTM D4541
Hiding Power	2-5/225	ASTM D5150
Flammability When Adhered to Concrete	Self-Extinguishing	ASTM D635
Coefficient of Friction — Dry	N/A	NFSI B101.0
Coefficient of Friction — Wet	N/A	NFSI B101.1

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

Clear to slightly amber before filler is introduced

CURE SCHEDULE

Dry to Touch	6-8 hours
Through Dry	8-12 hours
Dry to Walk	12 Hours
Dry to Light Use	16-24 hours
Full Cure	7 days

COVERAGE & PACKAGING

Coverage Rate	80 – 200 sq.ft./gal.
Application Thickness	8-20 mils
Recoat Window	Within 24 hours
Packaging	1.5, 3 Gallon kits

STORAGE, HANDLING & SAFETY

Store at 60-80 degrees F. 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 guidelines, 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.