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PATCHING, JOINT, COVE

W-31

TECHNICAL DATA SHEET

COMPONENTS	SOLIDS	VOC	MIX RATIO
3	100%	<50 g/l	2:1

DESCRIPTION

W-31 consist of a high viscosity, nonylphenol-free, epoxy resin, a thickened, cycloaliphatic amine reactant, and a specialty trowel aggregate blend. This combination achieves a rheology and consistency that makes it easy to trowel but also fast to return to its resting state, especially in vertical applications.

RECOMMENDED USES

W-31 is most often used in application as a cove base around the perimeter of an installation to prevent damage and/or contamination around the base of walls as well as provide containment where needed. It provides a seamless transition from the floor to wall.

LIMITATIONS

W-31 is designed to be applied between 1/8" to 1/4" thickness; this is application dependent. 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. 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-31 Part A (0.5 gal.) to 1 part W-31 Part B (0.25 gal.) to 45 lbs. PN 1324 trowel aggregate or 50 lbs. PN 1321 L decorative quartz trowel aggregate. 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 1 - 2 minutes making sure to not introduce excessive air into the material; then, under mixing, add desired trowel aggregate (PN 1324 or PN 1321L).

APPLICATION

Before applying W-31 to a vertical substrate, tape off the area of the wall base which will receive the W-31 cove gel and then prime the surface to be coated with a thin layer (6-10 mils) of any of the following PN products: P-30, P-99, or F-01 (standard or fast set). This will aid the 'hang' of W-31 during initial placement and smoothing. While the prime coat is still wet and/or tacky, begin applying the mixed W-31 epoxy cove gel to the base of the wall with appropriate tooling (margin trowel etc.). Once W-31 has been placed, smooth and finish with a cove trowel. Pull tape within 30 minutes of placing W-31. Use C-99 for trowel lubricant if desired. Recoat within 24 hours. Clean tools with a solvent similar to Xylene or Acetone.

COMPONENTS

Part A

Part B

Part C

GENERAL PRODUCT INFORMATION

Chemistry	Patching, Joint, Cove
Color / Finish	Clear & Color Packs
Number of Components	3
Solids by Volume	100%
VOC (Mixed)	<50 g/l
Mix Ratio	2:1
Mixed Viscosity	4500 cP 25°C/77°F
Gel / Working Time	25-35 minutes

Liquids

The data was 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	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°	60-70	
Color Scale	0.5-1.0	ASTM D1500
Accelerated Weathering	Significant 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

DELETE THIS KEY ENTIRELY — the note must not exist. Same for portalPnNotes.compressive_strength, .flexural_strength, .impact, .adhesion, .color_scale and .weathering (7 keys total). KEEP portalPnNotes.abrasion, .voc, .mix_ratio, .viscosity, .hardness, .dft, .coverage, .packaging, .mixes_per_kit and the five cure-time notes.

CURE SCHEDULE

Dry to Touch	6-8 hours
Through Dry	12-16 hours
Dry to Light Use	18-24 hours
Full Cure	7 days

COVERAGE & PACKAGING

Coverage Rate	2" Cant: 62 feet; 4" Cove with 1" radius: 36 feet; 6" Cove with 1" radius: 32 feet
Application Thickness	1/8" to 1/4"
Recoat Window	Within 24 hours
Packaging	3 Quart kits (Liquids - 0.5 gal A, 0.25 gal B)
Number of Mixes per Kit	1

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 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.