

PATCHING, JOINT, COVE

SP-15

TECHNICAL DATA SHEET

COMPONENTS

3

SOLIDS

100%

VOC

<50 g/l

MIX RATIO

2:1 plus Part C

DESCRIPTION

SP-15 consist of a high viscosity, nonylphenol-free, epoxy resin, a thickened, cycloaliphatic amine reactant and a free-silica, powder (PN 1170). This combination, when properly mixed, achieves a non-shrinking patching paste with high compressive and tensile strength and which is easy to shape, sand and grind after initial cure.

RECOMMENDED USES

SP-15 is most often used to patch concrete holes, cracks, divots and non-moving joints. It can also be used when a feathered edge is required for smooth transitions between differing planes. SP-15 kit will cover approximately 3.2 sq. ft. at 1/4" or 150 LF of 1/4" X 1/4" joint.

LIMITATIONS

SP-15 is designed to be applied at temperatures 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. A mixture consists of 1 quart SP-15 Part A, 1 pint SP-15 Part B and 3 LB. of Part C (PN 1170). Combine part A and B into a single container, large enough to accept the entire kit (1 mix equals .5 gallons when Part C is added). Premix liquids at 350 RPM for 1 minute using an appropriate mixing blade, and slowly add Part C under agitation until desired paste consistency is achieved.

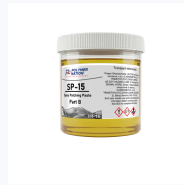
APPLICATION

Place mixed material on a mortar board and apply mixed material within 20 minutes using patching techniques. Recoat within 5 hours. If after 5 hours, abrade material with a minimum of 100 grit sanding screens. 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 or Color Packs
Number of Components	3
Solids by Volume	100%
VOC (Mixed)	<50 g/l
Mix Ratio	2:1 plus Part C
Mixed Viscosity	3500 cP 25°C/77°F
Gel / Working Time	10-15 minutes
Application Temperature	60-90°F
Odor	Subtle

A mixture consists of 1 quart SP-15 Part A, 1 pint SP-15 Part B and 3 LB. of Part C (PN 1170).

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

EPA Method 24. The data below was gathered at temperatures of 72-75°F and 30-50% RH

PHYSICAL PROPERTIES

Hardness	D65 @ 24 hours / D81 @ 7 days	
Tensile Strength	3,200 psi	ASTM C307
Compressive Strength	15,200 psi	ASTM C579
Flexural Strength	5,000 psi	ASTM C580
Abrasion – Taber CS-17	0.083g Loss (when higher abrasion resistance is required the addition of PC 1336 to the coating should be included)	ASTM D4060
Impact Resistance	>160 inch pounds	ASTM D2794
Adhesion to Concrete	>450 Substrate failure	ASTM D7234
Gloss @ 60°	30-40	
Color Scale	0.5-1.0	ASTM D1500
Accelerated Weathering	N/A guidelines, rules and laws.	ASTM G154
Moisture Absorption	<.2 weight increase	ASTM C413
Coefficient of Thermal Lineal Expansion	24.5 x 10 ⁻⁶ in/in/°F	ASTM C531
Water Vapor Transmission	See ASTM D3010	ASTM D1653
Independent Certificate – Third-Party Testing	N/A	ASTM D3010
Adhesion	N/A	ASTM D3359
Adhesion to Steel	N/A	ASTM D4541
Hiding Power	N/A	ASTM D5150
Flammability When Adhered to Concrete	Self-Extinguishing	ASTM D635
Coefficient of Friction – Dry	0.75	NFSI B101.0
Coefficient of Friction – Wet	0.7	NFSI B101.1

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

ASTM D4060 – Abrasion Resistance CS17 1000 g 1000cycles in g Loss

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

CURE SCHEDULE

Dry to Touch	1-2 hours
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Through Dry	2-4 hours
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Dry to Light Use	6-8 hours
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Full Cure	7 days
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COVERAGE & PACKAGING

Coverage Rate	SP-15 kit will cover approximately 3.2 sq. ft. at 1/4" or 150 LF of 1/4" X 1/4" joint.
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Recoat Window	Within 5 hours
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Packaging	0.5 Gallon kits
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Number of Mixes per Kit	1
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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.