Made in the USA with domestic and imported ingredients.

POLYMER NATION CHEMICAL COMPANY, LLC

Setting the Standard

405 Oakwood Ave
Waukegan, IL 60085

847-774-5038 | www.polymernation.com | sales@polymernation.com

TECHNICAL DATA SHEET: SP-16 RAPID PATCH LIQUID - AROMATIC

Product Overview

SP-16 combines a fast setting polyaspartic resin with our aromatic hardener blend to create a rapid pour and patch system. By incorporating a variety of fillers and aggregates the user can achieve a patching material that is ready for grinding in 30 minutes.

Uses and Benefits

SP-16 is most often used to patch concrete holes, cracks, divots and non-moving joints that will be top coated with a pigmented, UV stable finish coat.

Limitations

SP-16 is not intended as a finish coat as it will amber. Ideal application temperatures to be between 40-100°F. Cooler temperatures will increase cure times. Warmer temperatures will decrease working and cure times.

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.03732 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

This material is extremely fast reacting. Only mix what can be poured out in 3-4 minutes from initial mixing. A starting point mixture may consist of 2 FL. OZ. A, 2 FL. OZ. B and 245 grams of aggregate (about 5 FL. OZ.). Aggregate size and the fluidity of the mixed material is based upon user preference and application parameters. Combine 1 part A and 1 part B into a single container, large enough to accept the entire kit. Mix liquids at 200 RPM for 30 seconds using an appropriate mixing blade. Immediately add the aggregate into the mixed resin and agitate for 1 minute.

Application

Immediately pour the entire mixed content from the container into the area to be filled. Patch should be ground prior to the application of additional coatings. Clean tools with a solvent similar to Xylene or Acetone.

Technical Data

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

Packaging	2 Gallon kits
Mix Ratio by Volume	1:1
Mixed Viscosity	40 cP 25°C/77°F
Gel Time	4 minutes
Dry to Touch	10 minutes
Through Dry	30 minutes
Dry to Grind	30 minutes
Dry to Light Use	30 minutes
Full Cure	2 days
Shore D Hardness	D65 @ 24 hours
Shore D Hardness	D81 @ 7 days
Gloss @ 60 Degree Angle	N/A
VOC's of Mixed Material	<100 g/l EPA Method 24
Color Scale	0.5-1.0 per ASTM D1500
Solids by Volume Mixed	50%
Application in Mils	N/A
Available Colors	Clear

PHYSICAL PROPERTIES
SP-16 RAPID PATCH LIQUID - AROMATIC

Description	Standard	Results
Tensile Strength	ASTM C307	2,870 psi
Moisture Absorption	ASTM C413	<.2 weight increase
Coefficient of Thermal Lineal Expansion	ASTM C531	15-17 x 10-6 27-30 x 10-6
Compressive Strength	ASTM C579	13,000 psi
Modulus of Elasticity	ASTM C580	N/A
Flexural Strength	ASTM C580	5,550 psi
Water Vapor Transmission	ASTM D1653	See ASTM D3010
Impact Resistance	ASTM D2794	>160 inch pounds
Independent Certificate from third party testing agency	ASTM D3010	N/A
Adhesion	ASTM D3359	5A
Abrasion Resistance CS17 1000 g 1000cycles in g Loss	ASTM D4060	0.043g 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	2-5/200
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	N/A
Coefficient of Friction Wet Ave. three tests	NFSI B101.1	N/A
Accelerated Weathering Testing	ASTM G154	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.