



NSP SPECIALTY PRODUCTS

Technical Data Sheet

NSP 681 Epoxy Putty

Description: NSP 681 Epoxy Putty is a two component, high solids, trowel applied epoxy putty that was designed to fill cracks, voids and defects in vertical or horizontal surfaces. Film builds of up to 1” are achievable without sagging. 681 can be topped with a variety of NSP coatings to provide added protection from corrosion, abrasion and chemical attack.

Intended

Uses: Internal tank repair, filler for damaged/pitted concrete or steel, adhesive applications such as plate and bolt mounting, coving, restoration projects or for use as a block filler.

Product

Features: Easy trowel, putty knife or squeegee application
Outstanding adhesion
Rapid overcoat – 4 hrs @ 77F
Provides a smooth surface for overcoating with desired topcoats

Physical

Data: Type: Epoxy based Polymer
Color: Off White
Components: Two
Mixed Ratio: 2 Parts A (Resin): 1 Part B (Hardener) by volume
Volume Solids: 95% - VOC .30 lbs/gal
Pot Life @ 77F/25C: 60 minutes
Maximum Recommended Service Temperature: *Dry Air Temp. 200F*
Recommended Thickness, Mils DFT: 05-1000
Application Temperatures: 50-90F (10-32C)
Minimum Recoat Time @ 77F/25C: 4 hours
Maximum Recoat Time @ 77F/25C: 24 hours
Minimum Cure Time – Full Service Immersion @ 77F/25C: 48-72 hours
Theoretical Coverage: Actual coverage will vary depending on surface irregularity and depth of repair.
Thinner: DO NOT THIN
Packaging: Pre-portioned 3 Quart or 3 Gallon Kits

Limitations: This product may not cure properly in temperatures below 50 F (10 C)
All epoxies will show chalking/yellowing on exterior exposures. Application of epoxy coatings in cool temperatures and high humidity can result in the formation of amine blush. Blush may appear as a milky, white, tacky residue on the surface of the cured coating and must be removed before the application of another coat. Intercoat adhesion problems may occur if blush is not removed.



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Surface

Preparation: Steel – *Immersion Service:* SSPC-SP10 Near White Blast Cleaning with 3.0-mil profile
Non-Immersion Service: SSPC-SP6 Commercial Blast Cleaning with 2.0 mil profile
Concrete – Concrete must be properly cured for a minimum of 28 days before application of coating. Surface must be entirely free of oil, grease, dirt, detergent, surface water, laitance, curing compounds, coatings or other contaminants that may interfere with adhesion. The concrete must be abrasive blasted to provide an anchor pattern (similar to 60-80 grit sandpaper min.) for adhesion. Final prepared surface should be clean and rough. Consult SSPC-SP13 – Surface Preparation of Concrete.

Mixing

Instructions: This is a two-component system. Prior to mixing, components A Resin and B Hardener should be at room temperature (60-75 F/16-24C). Empty Part B Hardener into Part A Resin. Mix for 3 minutes using a Jiffy mixer head and ½” mechanical drill. To ensure complete mixing, scrape sides and bottom of container and continue mixing for an additional 1 or 2 minutes. Do not mix more material than can be applied within the pot life. DO NOT HAND MIX. Begin application immediately – no induction time.

Application: Air and surface temperature should be between 50-90F/10-32C. Do not begin application if air, substrate or material temperature is below 50 F/10C or expected to fall below 50F/10C within 12 hours of application. Do not begin application if dew point is within 5F/3C of the temperature. Variations in temperature can affect pot life and sag properties of this material. Clean up using Acetone or other Ketone Solvent. For concrete surfaces, a primer coat of either NSP 100, 101 and 110 is strongly recommended.

Method of

Application: Apply with putty knife, squeegee or trowel. Multiple applications may be necessary on vertical applications to achieve thickness greater than ½”.

Storage &

Shelf Life: Shelf life is 12 months from the date of manufacture when stored in unopened containers and under recommended conditions. Material should be stored in a dry area under cover at temperatures between 45-95F/7-35C. It is recommended that the coating components be kept inside at a minimum of 60F/16C for 24 hours prior to start of application. Keep away from heat, flame and ignition sources.

Warning & Safety:

FOR INDUSTRIAL USE ONLY – KEEP AWAY FROM CHILDREN

Refer to Material Safety Data Sheet for NSP 681 Part A and B supplied with this product prior to application. MSDS may be obtained via web site at www.nsp-specialty.com, fax 910-235-3902 or by calling 800-248-8907. Use only with adequate ventilation and avoid breathing mist or vapors. Prevent contact with skin and eyes with protective clothing/impervious gloves and goggles. Do not take internally. Wash thoroughly after handling.



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Disclaimer & Limited Warranty:

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