



NSP SPECIALTY PRODUCTS

Technical Data Sheet

NSP 155 Epoxy Binder Resin

Description: NSP 155 Epoxy Binder Resin is a 100% solids, two component, clear binder material used for patching/resurfacing worn and eroded concrete floors. With the addition of graded aggregates, this epoxy matrix repairs and protects concrete floor areas subjected to the harsh effects of high impact, abrasion and strong chemicals. NSP 155 Epoxy Binder Resin is ideal for slurry, grout (repair), and 1/8" broadcast or 1/4" trowel systems. This economical epoxy can also be used as a binder for decorative colored quartz applications.

Intended

Uses: Traffic Aisles, Docks, Ramps, Kitchens, Utility/Storage Rooms, Sumps, Pump Pads, Water and Waste Treatment, Warehouse and Processing Floors, Packaging Areas and Concrete Maintenance Repair

Product

Features:

- Moisture Tolerant – No V.O.C. Formula
- Water Clear Resin/Hardener
- Environmentally sound
- High loading capability with versatile applications
- Tenacious adhesion to properly prepared surfaces
- Resurfaces deteriorated concrete
- Easy one to one mixing ratio
- Can be top coated with other NSP High Performance Coatings

Physical

Data:

- Type: Modified Epoxy Resin/Proprietary Blend Amine Adduct Hardener
- Color: Clear
- Components: Two
- Gloss: High
- Mixed Ratio: 1 Part A (Resin): 1 Part B (Hardener) by volume
- Volume Solids: 100% - VOC 0 lbs/gal
- Pot Life @ 77F/25C: 40 minutes
- Maximum Recommended Service Temperature: Dry Air Temp. 200F/93C
- 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 @ 77F/25C: 24 hours



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Physical

Data: Minimum Recommended Thickness (System): 1/8" /125 mils
Maximum Recommended Thickness: N/A
Theoretical Coverage Applied With Graded Aggregate: 1/4" Trowel Down System = 250 mils or 6.4 sq/ft/gal
Theoretical Coverage: 1/8" Broadcast System – 125 mils or 35 sq/ft/gal
Thinner: Do not thin
Packaging: Pre-proportioned 2 Gallon and 10-Gallon Kit

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.

Surface Preparation: 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 or scarified to provide a profile for adhesion. Final prepared surface should be clean and rough. Consult SSPC-SP13 – Surface Preparation of Concrete. The minimum recommended profile can be seen in the chart below:

COATING SYSTEM THICKNESS	MINIMUM RECOMMENDED PROFILE
1/8 INCH	25 MILS
1/8-1/4 INCH	40 MILS

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). Pour Part B Hardener into Part A Resin. Mix for 2 minutes using a Jiffy mixer head and a mechanical drill. To ensure complete mixing, scrape sides and bottom of container and continue mixing for an additional minute. For trowel systems only, a mud paddle-mortar mixer is required for mixing aggregate systems. After mixing resin and hardener using above method, continue mixing while slowly adding desired aggregate. Continue to mix using a mud paddle – mortar mixer until uniform. Do not mix more material than can be applied within the pot life. DO NOT HAND MIX. Begin application immediately – no induction time required.



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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 properties of this material. . Clean up using Acetone or other Ketone Solvent. Primer – Selection of the appropriate NSP Primer is recommended for use with NSP 155 Epoxy Resin Binder.

Recommended

Systems:

1/8" Broadcast System-

Primer: Select NSP Primer for your particular application needs.

First Intermediate Coat: Apply one coat of NSP 155 Epoxy Binder Resin with notched squeegee followed by phenolic core roller to 15 mils WFT. Immediately broadcast silica or other aggregate to excess on wet film until binder resin can't be seen. Allow first intermediate coat to cure for 4 hours @ 77 Deg before proceeding to second intermediate coat. Any high spots or irregular areas should be smoothed before application of another coat.

Second Intermediate Coat: Apply one coat of NSP 155 Epoxy Binder Resin to 15 mils WFT.

Immediately broadcast silica or other aggregate to excess on wet film until binder resin can't be seen. Allow second intermediate coat to cure for 4 hours @ 77 Deg before proceeding to finish coat. Sweep excess aggregate using stiff bristled broom and vacuum. Any high spots or irregular areas should be smoothed before finish coat.

Finish Coat: NSP 155 Epoxy Binder Resin applied by notched squeegee followed by phenolic core roller to 15 mils WFT. Do not allow material to puddle. Smooth out to uniform finish and allow curing for a minimum of 24 hours before allowing traffic.

1/4" Trowel System-

Primer: Select NSP Primer for your particular application needs.

Intermediate or Finish Coat: NSP 155 Epoxy Binder Resin mixed with graded aggregate applied by screed rake followed by a hand trowel to approx. 6.4 sq/ft/gal. Apply pressure with trowel to smooth and compact into a monolithic surface. Allow to cure for a minimum of 6 hours @ 77 Deg before allowing foot traffic. System will be ready for full traffic within 24 hours. This coat may be top coated with any of NSP High Performance Coatings for added protection. Minimum and maximum recoat times must be observed.

Method of

Application: Hand Trowel, Squeegee or Screed Rake



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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 155 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.

Disclaimer & Limited Warranty:

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