



NSP SPECIALTY PRODUCTS

Technical Data Sheet

NSP 120 High Performance Epoxy Coating

Description: NSP 120 is a 100% solids, high gloss epoxy coating that is UL Water Quality Certified to NSF/ANSI Std. 61 – Drinking Water System Components – Health Effects for use as a protective barrier on properly prepared steel and concrete storage tanks and pipes. For systems not requiring certification please see separate Technical Data Sheet for non-certified system.

Intended

Uses:

Certified Trade Designation:

Coatings – Tanks – Water Contact Size Restriction \geq 800 gallons

Coatings – Pipe – Water Contact Size Restriction \geq 40" diameter (not exceeding a surface area to volume ratio of 42.58 cm²/L.

Potable Water Storage Tanks and Piping, Wastewater Treatment applications, pipe joint coating, maintenance repairs, and concrete/steel structures requiring Certification by NSF to NSF/ANSI Std. 61.

Product

Features:

Full Service/Cure time of 7 days without force curing or specialized equipment

Ease of application – brush, roller or spray

Excellent chemical and abrasion resistance

Tenacious adhesion to properly prepared surfaces

Physical

Data:

Type: Modified Epoxy Resin/Proprietary Blend Amine Hardener

Color: White, Black, and Off-White, Gray

Components: Two

Mixed Ratio: 2 Parts A (Resin): 1 Part B (Hardener) by volume

Volume Solids: 100% - VOC 0 lbs/gal

Pot Life @ 77F/25C: 30 minutes

Application Temperatures: 50-90F (10-32C)

Number of Coats: 1 or 2 – any combination of listed colors

Minimum Recoat Time @ 70 Deg F 6 hours

Maximum Recoat Time @ 70 Deg F 7 days

Theoretical Coverage: 1604 sq/ft/gal/mil – Allow for appropriate loss

Maximum Field Use Dry Film Thickness (in mils): 25

Minimum Cure Time – Full Service: * For NSF certification only – 7 days

Packaging: Pre-portioned 3 Qt. Kit/ 3 Gal 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.



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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). Pour Part B Hardener into Part A Resin. Mix for 3 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 1 or 2 minutes. Do not mix more material than can be applied within the pot life. DO NOT HAND MIX.

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. NSP-T1 Thinner will not clean hoses or equipment adequately.

Method of

Application: Brush, Phenolic Core Roller, Airless Spray

Recommended

Equipment: *Airless Spray*
Pump - a minimum of 30:1 - preferred 45:1
Tip Range - .023 to .027
Hose - 3/8" I.D. if less than 50 ft. - greater than 50 ft. use 1/2" (3500 psi High Pressure Spray Hose)
Pressure (in) 90 cfm minimum @100 psi
Pressure at the tip - increase pressure slowly to 2000 psi and fine tune to achieve proper spray pattern. Check condition of fan at spray tip. During the first seconds of spraying, the material will often finger. Raise or lower pressure to adjust width. Periodically check pressure gauges while spraying. Knowing operating pressure will be useful in analyzing any changes to your spray pattern.
Whip – 3’- 5’ and 1/4" ID Hose
Take care to prevent mixed material from setting up in hoses. For optimum results, keep hose as short as possible, out of direct sunlight or away from heat. Purge immediately after spraying with Acetone or Ketone solvent. Cured material must be mechanically removed.



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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 120 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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