NSP SPECIALTY PRODUCTS

Technical Data Sheet

NSP 120 High Performance Epoxy Coating/Lo-Vis

Description: NSP 120 Lo-Vis formulation, a two component, low viscosity, 100% solids, epoxy coating, offers excellent chemical, corrosion and abrasion resistance in severe industrial environments. This extremely versatile product features a unique 12-hour turnaround to service without force cure or specialized equipment.

Intended Uses: Tank/Pipe Linings, Immersion grade tack coat for other epoxy systems as well as adhesive resin for carbon fiber systems, Plant Maintenance, Waste Treatment, Wet Wells, Containment Areas, Walls, Machinery/Equipment, Structural Steel, Nuclear and Marine Applications.

Product Features:
Moisture Tolerant- Cures under water - 12 hour Full Cure
Ease of application – brush, roller or spray
Tenacious adhesion on properly prepared surfaces
Tile like high gloss finish easy to clean and decontaminate
Environmentally sound

Approvals:
Accepted for use by the USDA in Federally Inspected Meat/Poultry Plants
Accepted by the Canadian Food Inspection Agency in Registered Establishments
Nuclear- Level 1 Areas – Wet or Dry Wells Passed ANSI N101.2 Thermal Conductivity/ASTM 3911 for Design Basis Accident (DBA) & ASTM D-4082 Radiation Tolerance/Decontamination Testing per ASTM D4256/Chemical & Physical Exposure Test ASTM 3912, ANSI N5.12, ASTM D4060, Fire Testing ASTM E84 – Also passed over marginally prepared steel

Physical Data:
Type: Modified Epoxy Resin/Proprietary Blend Amine Adduct Hardener
Color: White and Light Gray
Components: Two
Gloss: High
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

P.O. Box 4690 Pinehurst, NC 28374 Toll Free: 800-248-8907 or 910-235-0468 Fax: 910-235-3902

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Physical Data:

Maximum Recommended Service Temperature:
Dry Air Temp. 300F/149C – Immersion: Deionized water 190F/88C
Application Temperatures: 50-90F (10-32C)
Minimum Recoat Time @ 77F/25C: 3 hours
Maximum Recoat Time @ 77F/25C: 48 hours
Minimum Cure Time – Full Service @ 77F/25C: 12 hours
Sag @ 77F/25C: 6 mils
Theoretical Coverage: 1604 sq/ft/gal/mil – Allow for appropriate loss
Maximum Thinner (if necessary): 20% by volume with NSP-T1 Thinner
Packaging: Pre-portioned 3 Qt. Kit/ 3 Gal Kit/ 15 Gal Kit

Physical Properties and Performance

PROPERTY	TEST METHOD	RESULT
Tensile Strength	ASTM D638	5600 psi
Compressive Strength	ASTM D695	11700 psi
Flexural Strength	ASTM D790	10580 psi
Adhesion to Concrete	ASTM D4541	Substrate Failure
Adhesion to Steel SSPC-SP10	ASTM D4541	>2895 psi
Adhesion to Damp Concrete	ASTM D4541	>350 psi Substrate Failure
Tensile Elongation	ASTM D638	5%
Hardness, Shore D	ASTM 2240	90
Abrasion Resistance	ASTM D460, 1000 g Load 1000 cycles	37.7 mg Average Wt. Loss
Flame Spread	ASTM E84	Class A
Flammability	ASTM D635	Self Extinguishing

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. 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.

Method of Application: Brush, Phenolic Core Roller, Airless Spray

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.

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Disclaimer & Limited Warranty:

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