

NSP 120 TECHNICAL DATA

NSF 61 Approved Potable Water Epoxy

**Potable Water Approved (NSF 61)
High Performance Epoxy Adduct
Cycloaliphatic**

**Non Hazmat
300°F Dry Service Temperature
Cool Temperature Cure
Fast Full Cure
VOC Class: Mastic VOC - 0 g/l**

**STANDARD
PRODUCT
DESCRIPTION**

NSP 120 is a two component blend of high performance epoxy resins and hardeners and offers a solvent free coating system with virtually no odor. This hard epoxy coating provides excellent chemical and abrasion resistance. Outstanding features include high film build in one coat application, 100% solids, and quick turnaround which significantly reduces downtime. This rigid epoxy is not recommended for surfaces that are subject to flexing.

Approvals: Certified under NSF Standard 61 for use in potable water tanks larger than 1,000 gallons and pipelines larger than 16 inches.
Authorized by USDA for use in Federally Inspected meat and poultry plants where there is a possibility of incidental food contact.

USES

Harsh/Severe Industrial Maintenance Applications
Waste Pits
Wastewater Treatment Applications
Ships - steel, anchors, propellers, ballast tanks, stairwells, aisles
Potable Water Tanks (cold or hot water contact size restriction: >1,000 gal.)

Tank Linings
Pulp and paper industry
Ponds and fish holding tanks
Marine Barrier Coat

**PHYSICAL
PROPERTIES**

TYPE Modified Epoxy
COMPONENTS Two
COLOR White, baby blue
GLOSS High
VOLUME SOLIDS 100%
COVERAGE 90-160 sq. ft./gallon
SHELF LIFE Unmixed components - one year
MAX. REC. SERVICE TEMP. Dry air temp. 300°F (149°C) - without post curing
Immersion: Deionized water 190°F (88°C)
CATHODIC DISBONDMENT 9.5 mm²
MIX RATIO 2:1 (Part A:Part B) by volume
POT LIFE 1 hour @ 77°F (25°C) for a 6 oz batch. Time will be extended at lower temperatures and shortened when higher. The larger the batch the shorter the pot life.
METHOD OF APPLICATION Brush, 1/4" Nap Phenolic Core Roller, Airless Spray
REC. THICKNESS Total application thickness may vary from 5 mils to 25 mils
THINNER If necessary - do not exceed 20% thinner by volume of mixed material
CLEAN UP Use Acetone or other Ketone solvent.

DRYING TIME

These values are approximate and depend on several factors including coating thickness, amount of thinner used, and surface temperature. They are to be used as a guideline only, actual time may vary slightly.

TEMP (F)	POT LIFE (HOURS: MIN.)	CURE TIME (HOURS)	MINIMUM RECOAT TIME (HOURS)	MAXIMUM RECOAT TIME (DAYS)
50°	2:00	48	12	4
77°	1:00	12	6	4
90°	0:30	9	3	3

*NOTE: Below 50°F/10°C cure is greatly retarded and film properties may be adversely affected.

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PREPARATION	<p>Surface must be clean of oils, grease, biological growth, loose rust and other loose contaminants.</p> <p>For Potable Water Storage Tanks: Steel - Preclean according to SSPC-SP1 as required. Suitable methods of precleaning include high pressure water blasting, steam cleaning or solvent washing followed by wiping with dry, clean rags. Prior to abrasive blasting, grind smooth all weld seams, sharp edges, weld spatter, pitted or irregular surfaces. All surfaces to be coated should be abrasive blasted in accordance with SSPC-SP10 or NACE 2, Near White Metal Blast Finish. Abrasive Media should be selected to achieve an anchor pattern of 2.0 to 3.0 mils. If salt contamination is suspected, clean substrate using liquid soluble salt remover according to the manufacturers directions. It is strongly recommended that all surfaces be blasted and coated in the same day to prevent possible flash rusting.</p> <p>Concrete - Substrate to be coated should receive a sweep or brush blast cleaning (SSPC-SP7) to remove sharp edges, laitance or foreign matter and to provide an anchor pattern for adhesion. Abrasive blast media should be selected to product a rough texture similar to 80-100 grit sandpaper. A combination of 40/60 mesh size is recommended to avoid damage to sound substrate while still opening cavities or 'bugholes.' Nozzle pressure should be approx. 50-60 psig. Immediately prior to coating, the entire area should be cleaned and vacuumed free of all loose matter, blast media, dust or other contaminants. All standing water should be removed prior to coating; however concrete may be in a damp or moist condition and if necessary NSP 120 can be applied underwater to small areas. The final prepared surface shall have a pH of between 5 and 10 as determined by the use of pH paper.</p>
APPLICATION	<p>Best if not applied below 50°F (10°C) or if the dew point is within 5° of the temperature. All application and surface preparation should be consistent with good painting practices.</p> <p>This is a two component system. Thoroughly blend 2 parts base to 1 part curing agent using a power agitator for 3-5 minutes. To ensure complete mixing, scrape sides and bottom of containers. Incomplete mixing will result in soft spots or color variation. Begin application immediately after mixing.</p> <p>First Coat - Apply one coat of NSP 120 coating at 4-8 mils by brush, or 1/4" nap phenolic core roller at 12-20 mils, or airless spray at 4-20 mils. Allow this first coat to cure a minimum of 12 hours at 77°F before proceeding to finish coat. If a second coat is applied care should be taken to avoid any contamination between coats. Allow to cure a minimum of 2 days before returning to service. Airless application - see 45:1 ratio pump: .023" - .027" orifice tip; use 3/8" material hose unless more than 50 ft. is needed, then use 1/2" material hose.</p>
LIMITATIONS	<p>Call Progressive Epoxy Polymers for NSF 61 restrictions/requirements.</p> <p>When applying NSP 120 in cooler temperatures (50°F - 60°F) and high humidity, it is necessary to watch for the formation of an amine blush. This blush may appear as a milky white residue on the surface of the cured coating, but will not effect the integrity of the film. However, blush must be removed by solvent wipe before the application of another coat or an intercoat adhesion problem will occur.</p> <p>'Gritty' lumps in the part A are signs of common epoxy crystallization. Warming the part A epoxy for several hours at approx. 100° F will dissolve the lumps and return it to a creamy consistency.</p>
STORAGE	Store closed containers in cool, dry area
TRANSPORT	Not Regulated by DOT

SAFETY: This is a hazardous material if misused. Read and understand the Material Safety Data Sheet (MSDS) before use.

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