



# NSP SPECIALTY PRODUCTS

## Technical Data Sheet

### NSP 107 - 100% Solids Primer

**Description:** NSP 107 Primer is used to promote the adhesion of 900XT Flake Filled High Performance Novolac. Designed to prevent abrasive blasted steel from developing rust bloom prior to the application of the topcoat. For maximum performance from your coating system, this primer should be used on steel in immersion service. All concrete surfaces should be primed regardless of intended service.

**Intended Uses:** 100% Solids Primer for Novolac coating system and urethane topcoats. For use on horizontal or vertical steel and concrete surfaces.

**Product Features:** Meets all VOC Requirements, Low Odor, User Friendly Application, Moisture Tolerant

**Physical Data:**  
Type: Modified Epoxy Resin/Proprietary Blend Hardener  
Color: Clear  
Components: Two  
Mixed Ratio: 1 Part A (Resin): 1 Part B (Hardener) by volume  
Volume Solids: 100%  
Tensile Strength - ASTM C-307                      2,000 - 2,500 PSI  
Tensile Elongation - ASTM C-307                      20-25 %  
Adhesion to Concrete - ASTM D-4541                      Cohesive Failure of concrete  
Adhesion to Steel - ASTM D-4541                      2,200-2,500 PSI

Pot life will depend on temperature. To prevent waste and avoid damage to equipment, do not mix more Material that can be used according to the table below.

TEMPERATURE	POT LIFE
50°F	90 min.
75°F	60 min.
90°F	30 min.

Application Temperatures: Substrate temperatures for both concrete and steel substrates must be between 50-100F. Relative humidity must not exceed 90%

Temperature	Minimum Recoat Time	Maximum Recoat Time
50°F	12 hrs.	8 Days
75°F	6-8 hrs.	5 Days
90°F	4-5 hrs.	3 Days



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**Limitations:** This product may not cure properly in temperatures below 50 F (10 C). Application of epoxy coatings in cool temperatures and high humidity can result in the formation of amine blush. Blush may appear as a milky, oily, white, tacky residue on the surface of the cured coating and must be removed before the application of another coat. Inter coat adhesion problems may occur if blush is not removed with warm water and detergent. Remove all residue and dry prior to application of next coat.

**Surface Preparation:**

New 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.

Old Concrete - 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. Do not use NSP 100 as a primer over tightly adhered old coatings.

Steel: - Immersion and heavy spillage service: SSPC SP-5 White Metal Blast with minimum of 2.0-3.0 mil profile – Atmospheric service – SSPC SP-6 Commercial Blast with 2.0 minimum profile

**Mixing Instructions:** This is a two-component system. COMPLETE UNIT MUST BE MIXED AND APPLIED AT ONE TIME. DO NOT MIX PARTIAL QUANTITIES FROM CONTAINERS OR PROPER COMPONENT RATIOS MAY NOT BE OBTAINED. 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 minute. DO NOT HAND MIX. Begin application immediately – no induction time.

**Application:** Recommended Spread Rate: **Concrete:** 150-200 sq/ft/gal **Steel:** 250-300 sq/ft/gal. Actual dry film thickness may vary due to the porosity of the concrete.

Thinner: Do not thin

Packaging: Pre-measured 1 gallon and 5 gallon kits

Air and surface temperature should be between 50-100 Deg. F. 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 of this material. Clean up using Acetone or other Ketone Solvent. Application in direct sunlight may lead to blistering or pinholes due to outgassing of air in concrete. Double priming, shading or evening application may be required. To optimize intercoat adhesion, application of base coat while primer is tacky is recommended.



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#### Method of

**Application:** 3/8" nap, phenolic core roller or Airless Spray

#### Storage &

#### Shelf Life:

FLAMMABLE LIQUID – KEEP AWAY FROM HEAT, FLAME AND POSSIBLE IGNITION SOURCES. 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. Do not let product freeze.

#### Warning &

#### Safety:

**FOR INDUSTRIAL USE ONLY – KEEP AWAY FROM CHILDREN – FLAMMABLE LIQUID**

Refer to Material Safety Data Sheet for NSP 107 Part A and B supplied with this product prior to application. MSDS may be obtained via web site at [www.nsp-specialty.com](http://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:

The information contained herein is intended to acquaint you with this product and is not intended to be exhaustive. This information is subject to modification from time to time without further notice. No agent, employee or representative of Seller has the authority to bind Seller to any oral affirmation, recommendation or representation of warranty unless contained in a written agreement signed by both Buyer and Seller. Seller expressly disclaims all other warranties, express or implied, including but not limited to any implied warranties of merchantability of fitness for a particular purpose or any other warranties relating to the condition of this product. Furthermore, Buyer acknowledges that it is familiar with and experienced in the use of industrial coating products and expressly assumes all responsibility resulting from or in any way connected with the possession, transportation, handling or use of this product, whether singly or in combination with other products. Seller's liability, with respect to any claim arising out of or relating to Buyer's purchase, possession or use of this product, is expressly limited to, at Seller's option, (i) replacement of the product, or (ii) return of the purchase price with transportation charges incurred by the Buyer, if material is proven defective. Any claim for defective product must be received in writing within one year from the date of shipment. Seller assumes no responsibility for incidental or consequential damages, or for any other damages related to any alleged nonconformity or defect in the product or to its purchase, possession or use.



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