



NSP SPECIALTY PRODUCTS

Technical Data Sheet

NSP 650 Crack Repair/Joint Filler

Description: NSP 650 is a two component, 100% solids, elastomeric epoxy developed for cracks and joints on horizontal surfaces up to 1 ½" wide. This product retains flexibility after curing to allow for concrete or slab movement. NSP 650 contains no solvents and will not shrink upon cure. To enhance the appearance of NSP flooring systems, this filler is available in a variety of colors.

Intended

Uses: Expansion/Control Joints, Cracks, Stair Joints, Parking Decks, Provides seamless appearance when used with NSP Flooring Systems

Product

Features: Easy one to one mix ratio
Low odor – 100% solids, no VOC
Good chemical and moisture resistance
Self-leveling formula

Physical

Data: Type: Modified Epoxy Resin/Proprietary Blend Amine Adduct Hardener
Color: Light Gray, White, Black, Tile Red – other colors available upon request
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: 45 minutes
Maximum Recommended Service Temperature: Dry Air 200F/93C
Application Temperatures: 50-90F (10-32C)
Maximum Recoat Time @ 77F/25C: 48 hours
Light Traffic: @ 77 F/25C 8 hours
Minimum Cure Time – Full Service @ 77F/25C: 48 hours
Theoretical Coverage: 1604 sq/ft/gal/mil – Allow for loss factor
Thinner: Not recommended
Packaging: Pre-portioned 2 Gallon, 4 Gallon, 10-Gallon Kit

Physical Properties and Performance

PROPERTY	TEST METHOD	RESULT
Tensile Strength	ASTM D638	500 psi
Compressive Strength	ASTM D695	1600 psi
Adhesion to Concrete	ASTM D4541	Substrate Failure
Adhesion to Damp Concrete	ASTM D4541	>350 psi Substrate Failure
Tensile Elongation	ASTM D638	25%
Hardness, Shore D	ASTM 2240	55 +/- 5
Shrinkage		Nil



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Coverage: APPROX. LINEAR FEET PER GALLON

Joint	$\frac{1}{4}$	$\frac{1}{2}$	$\frac{3}{4}$	1"
$\frac{1}{4}$	306	-	-	-
$\frac{1}{2}$	154	77	-	-
$\frac{3}{4}$	102	51	34	-
1	77	38	25	19

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:**

Joints: Concrete must be properly cured for a minimum of 28 days before application of filler. For joints to be prepared properly, the joints must be raked out to the full width and depth as designed. The joints must also be thoroughly cleaned by grinding, wire brushing, blasting with sand or high water pressure or acid washing. All loose or unsound concrete must be mechanically removed by means of power tool equipment or blasting. The final prepared joint should be free from old sealants, coatings, dirt, form oils, standing water or other contaminants. Loose debris can be blown out with oil-free compressed air. Cleanliness and soundness of the final surface will enhance adhesion of the joint filler. The depth of the joint can be controlled using backer rod that is forced into the joint and sized properly. Joints less than $\frac{1}{2}$ " wide the depth of the joint should be equal to the width. Joints from $\frac{1}{2}$ " to 1" wide the depth of the joint should be $\frac{1}{2}$ ". Joints over 1" wide the depth of the joint should be one half of the width. Joints can also be saw cut and filled. Call NSP Specialty Products for an exact recommendation if needed.

Cracks less than $\frac{1}{4}$ " wide: Concrete must be properly cured for a minimum of 28 days before application of filler. The crack must be thoroughly cleaned by grinding, wire brushing, blasting with sand or high water pressure or acid washing. All loose or unsound concrete must be mechanically removed by means of power tool equipment or blasting. The final prepared crack should be free from old sealants, coatings, dirt, form oils, standing water or other contaminants. Loose debris can be blown out with oil-free compressed air. Cleanliness and soundness of the final surface will enhance adhesion of the crack filler. For cracks greater than $\frac{1}{4}$ " wide, follow instructions for joint filler.



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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.

Method of

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 equipment adequately. Clean up using Acetone or other Ketone Solvent.

After joints/cracks have been properly prepared and sized and for optimum results, prime using NSP 100, 101 or 110 products. Do not let primer puddle in joint. Allow 1-3 hours @ 77F/25C curing before filling.

Fill joint to grade by pouring 650 into joint and level/tool using a crack squeegee, trowel or other suitable method. Two application passes may be needed to level and bring joint flush with floor. Allow 650 to cure for 24 hours before returning to service.

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 650 Part A and B supplied with this product prior to application. SDS may be obtained via web site at www.nsp-specialty.com 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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