



WATERSAFE II™

100% SOLID AROMATIC POLYUREA

NSF/ANSI Standard 61 Section 5-2011 Certified
Revised 01.21.14

DESCRIPTION

WATERSAFE II™ is formulated for high tensile and elongation properties to bridge cracks and accommodate movement on cementitious substrates. WATERSAFE II™ is ANSI/NSF 61 compliant as tested by an ANSI accredited lab and is approved for direct contact with potable water. It is a fast setting, rapid curing, 100% solids, flexible aromatic, two component spray polyurea that can be applied to suitably prepared concrete and metal surfaces. It may be applied in single or multiple applications without appreciable sagging and is relatively insensitive to moisture and temperature during processing allowing application in most temperatures.

FEATURES

- ANSI/NSF 61 compliant for Potable Water
- Zero VOC (100% Solids)
- Excellent Thermal Stability
- Meets USDA Criteria for incidental food contact
- Low Temperature Flexibility
- Installed With or Without Reinforcement in Transitional Areas

RECOMMENDED USES

- Concrete/Steel Water Storage Tanks
- Food Processing Plants
- Irrigation Canals and Flumes
- Secondary Containment
- Marine Environments

COLOR

WATERSAFE II™ is available in Neutral, and Light Blue. Custom colors will be quoted upon request. It should be noted that WATERSAFE II™ is an aromatic polyurea; therefore, as with all aromatics color change and superficial oxidation will occur.

PACKAGING

Standard 110 gallon sets. Also available in 10, 30, and 60 gallon sets.

PROPERTIES

Solids by Volume	100%
Solids by Weight	100%
Volatile Organic Compounds	0 lbs/gal (0g/l)
Theoretical Coverage DFT	Spray - 1600 sq. ft./gal @ 1 mils
Weight per gallon (approx.)	8.8 lbs. (3.99 kg) / gal
Number of Coats	1-2
Shelf Life Unopened Containers @ +65°F (18°C)	"A" side 6 months "B" side 12 months
Pot Life @ 150°F	5 – 8 secs
Mix Ratio	1 "A": 1 "B"
Viscosity at 77°F	"A" side 1344± 20 cps approx "B" side 319 ± 20 cps approx
Service Temperature	-40°F to *248°F (-40°C to 120°C)
Recommended applied thickness	>60 mils (1.5 mm)
Return to Service: Dependant on substrate and ambient temps	Foot Traffic: 1 – 4 hours Full Service: >24 hours
Potable Water Certification US ANSI NSF-61	Pass
Tensile Strength ASTM D 412	>4000 psi (27.80 mpa) ± 200 psi
Elongation ASTM D 412	550%
Hardness (Shore A) ASTM D2240	88 ± 3
Hardness (Shore D) ASTM D2240	40 ± 3
Abrasion Resistance 1 kg. 1000 rev.	CS-17 wheel 1.6 mg. lost

All cured film properties are approximate since processing parameter, admixture types, and quantities change physical properties of the cured elastomer. All samples for above tests were force cured or aged for more than three weeks. It is recommended that the user perform their own independent testing. The samples for tests were sprayed with a Graco HXP3 @2500 psi dynamic (172 bar). Primaries/Hose Heat 170°F (77°C) MP Fusion Gun with 29/29 module and .040 ceram tip. *The 248°F is intermittent dry exposure. Maximum water temperature of 150°F.

CURING SCHEDULE

Gel	5 - 8 seconds
Tack Free	30 - 45 seconds (thickness and substrate temperature dependent)
Recoat	0 - 6 hours
To Immersion	24 hours

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SPI Manufacturing/Distribution Locations: Lakewood, WA · Rowlett, TX · Anchorage, AK

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SURFACE PREPARATION

Apply WATERSAFE II™ only to clean, dry, sound surfaces free of loose particles or other foreign matter. WATERSAFE II™ can be sprayed over a broad range of ambient and substrate temperatures. Contact technical service personnel for specific recommendations, pricing, and availability of spray and auxiliary equipment.

It is recommended that WATERSAFE II™ be sprayed in multi-directional (north-south/east-west) passes to ensure uniform thickness.

The polyol "B" component must be thoroughly power mixed each day, prior to use. Contact a SPI technician regarding proper mixing equipment.

Follow the instructions attached to "A" and "B" containers.

When applying WATERSAFE II™ over new and old concrete; Refer to SSPC-SP13/NACE 6, or ICRI 03732:CSP 3-5 New concrete must be cured for 28 days prior to product application.

RECOMMENDED EQUIPMENT SETTINGS

- Standard 1:1 ratio, heated, plural-component equipment developing a minimum of 2500 psi (173 bar) dynamic pressure with heating capabilities to 175° F (79 °C) will adequately spray WATERSAFE II™. These include: GRACO Reactor E-XP2, H-XP2, H-XP3, or PMC PHX series, GH-25 3000, GH-40 3500. Gun models include GRACO Fusion MP, Gap Pro, GX7-DI, and GX-8 Pro gun.
- Pre-heater temperature should be at 160°F – 170°F (+71°C - +77°C).
- Hose temperature should be at 160°F – 170°F (+71°C – +77°C). A hose thermometer inserted under the insulation near the gun should read a minimum of 140°F – 150°F (+60°C – +66°C)
- Physical properties will be enhanced when sprayed at higher pressure (3000 psi or more) (20.8 mpa).
- Other application equipment may be acceptable depending on product and application. Contact SPI technical service for specifics.

MIXING AND THINNING

WATERSAFE II™ may not be diluted under any circumstances. Thinning is not required. Using any thinner may adversely affect product performance. Thoroughly mix Part "B" (resin side) with approved air driven power equipment until a homogenous mixture and color is obtained.

GENERAL SAFETY, TOXICITY & HEALTH DATA

Safety Data Sheets are available on this coating material. Any individual who may come in contact with these products should read and understand the M.S.D.S. **CHEMTREC EMERGENCY NUMBER 1-800-424-9300**

WARNING: Contact with skin or inhalation of vapors may cause an allergic reaction. Avoid eye contact with the liquid or spray mist. Hypersensitive persons should wear protective clothes, gloves and use protective cream on face, hands and exposed areas.

CLEAN UP: Use DPM, NMP, and Polyclean.

EYE PROTECTION: Safety glasses, goggles, or a face shield are recommended. **SKIN PROTECTION:** Chemical resistant gloves are recommended. Cover as much exposed skin area as possible with appropriate clothing. **RESPIRATORY PROTECTION:** Use a respirator approved for isocyanates and organic vapors. If you are not sure or not able to monitor levels, or if you are spraying in an enclosed/indoor area, use MSHA/NIOSH approved supplied air respirator. Consider the application and environmental concentrations in deciding if additional protective measures are necessary. **INGESTION:** Do not take internally. It is believed that ingestion of polymeric isocyanates would not be fatal to humans, but may cause inflammation of mouth and stomach tissue.

LIMITATIONS

The aforementioned data on this product is to be used as a guide and is subject to change without notice.

The information herein is believed to be reliable, but unknown risks may be present. Specialty Products, Inc. makes no warranties, expressed or implied, including patent warranties or warranties of merchantability or fitness of use, with respect to products or information set forth herein. Nothing contained herein shall constitute permission or recommendation to practice any invention covered by a patent without a license from the owner of the patent.

Accordingly, the buyer assumes all risks whatsoever as to the use of these materials and buyer's exclusive remedy as to any breach of warranty, negligence, or other claim shall be limited to the purchase price of the materials. Failure to adhere to any recommended procedures shall relieve Specialty Products, Inc. of all liability with respect to the materials and the use thereof.

APPLICATION

- Both Side "A" and "B" materials should be preconditioned to 75 – 80°F (24° - 27°C) before application.
- Surface temperature must be at least 5°F above the dew point.
- WATERSAFE II™ should be sprayed in multi-directional (north-south/east-west) passes to ensure uniform thickness.
- This product is for professional use only.
- This product must be stored at temperatures above 60°F. Avoid freezing temperatures. Store drums on wooden pallets to avoid direct contact with the ground.
- Minimum material/container temperature for spray application 70°F (21°C).
- Avoid moisture contamination in containers. Containers should not be resealed if contamination is suspected, CO₂ created pressure can develop. Do not attempt to use contaminated material.
- Undried air exposed to liquid components will reduce physical properties of the cured coating.

Do not open until ready to use. Both Part "A" and "B" containers must be fitted with desiccant device during use.

Note: The material supplied is two components (Component "A"/Component "B") used to formulate this product. The quality and characteristics of the finished polymer is determined by the mixture and application of the two components.

WARRANTY & DISCLAIMER

Specialty Products, Inc. has no role in the manufacture of the finished polymer other than to supply its two components. It is vital that the person applying this product understands the product, and is fully trained and certified in the use of plural-component equipment.

Specialty Products, Inc., an Alaska corporation, warrants only that the two components of this product shall conform to the technical specifications published in the product literature.

The quality and fitness of the product are dependent upon the proper mixture and application of the components by the applicator. There are no warranties that extend beyond the description on the face of this instrument.

Failure to apply the product within the parameters stated on this document shall void the warranty.

SPECIALTY PRODUCTS, INC. MAKES NO WARRANTY OF MERCHANTABILITY OF THE PRODUCT OR OF FITNESS OF THE PRODUCT FOR ANY PARTICULAR PURPOSE.

Specialty Products, Inc. makes no warranty as to the quality of any product modified, supplemented, tinted, or altered in any way after it leaves the manufacturing plant.

The liability of Specialty Products, Inc. for any nonconformity of the product to its technical specifications shall be limited to replacement of the product.

The sole exclusive remedy of buyer, which is to have Specialty Products, Inc. replace any nonconforming product at no cost to buyer, is conditioned upon buyer notifying Specialty Products, Inc. or its distributor in writing of such defect within thirty days of the discovery of such defect.

Specialty Products, Inc. shall not be liable for any direct, incidental, or consequential damages resulting from any breach of warranty.

The data presented herein is intended for professional applicators or those persons who purchase or utilize this product in the normal course of their business.

The potential user must perform any pertinent tests in order to determine the product's performance and suitability in the intended application, since final determination of fitness of the product for any particular use is the responsibility of the buyer.

The aforementioned data on this product is to be used as a guide and is subject to change without notice.

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Accordingly, the buyer assumes all risks whatsoever as to the use of these materials and buyer's exclusive remedy as to any breach of warranty, negligence, or other claim shall be limited to the purchase price of the materials. Failure to adhere to any recommended procedures shall relieve Specialty Products, Inc. of all liability with respect to the materials and the use thereof.

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