

Urexpan® NR-300

Specification Data Sheet



Jet Fuel & Blast Resistant Traffic-Grade Sealant

1. BASIC USES

• Urexpan® NR-300 is designed specifically for sealing joints in airport runways, terminal ramps, hangars and transportation storage areas, but is equally effective in driveways, parking decks, sidewalks or other areas where the various fuels and liquids may come into contact with the sealant after curing.

2. MANUFACTURER

Pecora Corporation
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Harleysville, PA 19438
Phone: 215-723-6051
800-523-6688
Fax: 215-721-0286
Website: www.pecora.com

3. PRODUCT DESCRIPTION

Urexpan® NR-300 is a two-part, chemically-curing, cold-applied self-leveling modified polyurethane elastomeric sealant that withstands heavy vehicular traffic and is virtually unaffected by jet fuel, hydraulic fluids, oil or lubricants. It is available in two versions: hand mix (Type H) and machine mix (Type M), the only difference being the rate of cure.

Limitations: Not recommended for joints contaminated with oil, grease, wax, curing compounds, concrete sealers, form release agents, etc. Not for use in joints less than 1/4" (6 mm) wide.

Note: Urexpan® NR-300 is not to be used as a structural component or in longitudinal expansion joints that are intended to be used on a constant traveling surface.

PACKAGING

- 4-gallon units (15.14 L) Hand mix
 - 10-gallon units (416.35 L) Machine mix
 - 110-gallon unit Machine Mix
- A unit consists of equal volumes of base and activator.

COLOR

- Dark Bronze - Base
- Golden Bronze - Activator

4. TECHNICAL DATA

Applicable Standards: Meets the requirements of Federal Specifications: SS-S-200E; SS-S-195B & TT-S-00227E: ASTM D-1850; ASTM C-920 & PA DOT 408/90.

Independent Testing: When submitting samples of NR-300 to outside agencies for the purpose of specification testing, please contact Pecora Technical Services for a sample submittal form. Fill out the form completely and return. The test sample then will be shipped to you for submittal.

Joint Design: The width of the joint should be a minimum of 8 times the anticipated movement. The width or depth of the joint should not be less than 1/4" (6 mm). In joints up to 1/2" (12 mm) wide, the depth of the sealant should be equal to the width. In joints wider than 1/2" (12 mm), but not exceeding 1" (25 mm), the depth should be maintained at 1/2" (12 mm). For joints wider than 1" (25 mm), please consult our Technical Services department.

5. INSTALLATION

Surface Preparation: Surfaces must be clean and dry. The presence of moisture will cause gassing before the sealant achieves ultimate cure. Oil, grease, wax, form release agents, curing compounds, laitance and old caulking compounds must be removed by sandblasting or sawing to sound, virgin concrete for optimum sealant performance.

Priming: Primers should always be used in extended exterior exposure applications where horizontal joints may be subject to conditions of standing water, ice, jet fuel or other liquids. With Urexpan® NR-300, P-75 is used on concrete and P-100 on metal. Primers should be dry before the sealant is applied. Drying time for P-75 is one hour at 75° F (24° C) and 15 minutes for P-100. The sealant must be applied within 8 hours after priming. For further information on primers, contact Technical Service.

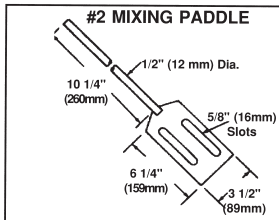
Note: Priming is never a substitute for proper surface preparation as outlined in the section above.

TYPICAL PHYSICAL PROPERTIES at 75°F (24°C), 50% RH

Test Property	Value	Test Procedure
Hardness, Shore OO		
Initial	12-15	ASTM C661
Ultimate	23-24	ASTM C661
Initial Cure		
Hand mix (hours)	24	ASTM C679
Machine mix (minutes)	30	ASTM C679
Jet Fuel Immersion (hours)	24	Meets req. of SS-S-200E
Maximum Movement Capability		
Extension (%)	12.5	ASTM C719
Compression (%)	12.5	ASTM C719
Extension (%)	50.0	SS-S-200E
Pot Life		
Hand mix (hours)	4	Pecora Corporation
Machine mix (minutes)	15	Pecora Corporation
Resilience recovery (%)	75	ASTM D5329
Tack-Free to Touch		
Hand mix (hours)	6	ASTM C679
Machine mix (minutes)	30	ASTM C679
Open to Traffic		
Hand and Machine mix (hours)	48	Pecora Corporation
VOC Content (g/L)		
Activator	100	D3960
Base	100	D3960

Joint Backing: Close cell polyethylene backer rod should be used to control the depth of the sealant. Use a size that will compress 25% when inserted into the joint. Non-porous semi-rigid backing materials may be used if a bondbreaker tape is applied to prevent adhesion of the joint filler. Dry, clean sand may be used as a joint filler in interior areas where freezing temperatures are not anticipated and joint movement is minimal.

Mixing: Type H - Pour equal volumes of activator and base into a clean container of sufficient capacity to permit mixing of the two components. Thoroughly blend the activator and base for a minimum of 5 minutes using a heavy-duty, low-speed drill (200 to 400 rpm) with a Pecora #2 Mixing Paddle or a Pecora Prop Mixer. Scrape sides and bottom of container frequently; keep the mixer below the surface to avoid entraining air.



Type M - Pour equal volumes of activator and base into the appropriate holding tanks of the mixing machine. Activator should be mixed prior to use, to remove any setting that may have occurred during storage and shipping. Use collapsible blade in large bung hole to avoid ambient air entrainment. Activator and base should arrive at the mixing head on a 1:1 ratio by volume. Before filling the joints, extrude and cure a test sample to see that a correct mix is achieved.

Note: In containers, it may be difficult to distinguish between activator and base colors. If it is necessary to do so, smear a sample of each on a white surface. The dark bronze material is the base, and the golden bronze colored material is the activator. See technical bulletin #78 for more information. Mix drums thoroughly before conducting color check.

Application: Fill joints at temperatures between 40° F (5° C) and 90°F (32°C). Lower temperatures will delay the cure; higher temperatures will decrease pot life and accelerate cure.

If the joint is inclined on a slope greater than 1.5%, it will be necessary to dam the joint at intervals with Backer Rod to prevent excessive flow. When the sealant has achieved partial cure, the Backer Rod can be removed and the resulting voids filled with sealant.

Cleaning: Clean tools, hands and spillage as soon as possible with xylene* or toluene*.

**(Solvents mentioned are toxic and flammable; observe manufacturers precautions and refer to Material Safety Data Sheets).*

Storage Life: Approximately 6 months when stored at temperatures lower than 80° F (27° C) in original, sealed containers. After a container has been opened, the contents should be used as soon as possible. Exposure to moisture in the air considerably shortens storage life.

Precautions: Despite its elasticity and abrasion resistance, Urexpan® NR-300 can be damaged by sharp objects such as spike heeled shoes, snowplow blades, studded tires, etc.

Contains diisocyanates; avoid prolonged breathing of vapors and contact with skin and eyes. Wash hands thoroughly with soap and water after use and before eating or smoking. Upon accidental contact with eyes, flush thoroughly with water and seek medical attention immediately. Refer to Material Safety Data Sheet.

**FOR PROFESSIONAL USE ONLY.
KEEP OUT OF THE REACH
OF CHILDREN.**

6. AVAILABILITY AND COST

Pecora products are available from stocking distributors nationwide. For the name and telephone number of your nearest representative, call the number below or visit our website at www.pecora.com.

7. WARRANTY

Pecora Corporation warrants its products to be free of defects. Under this warranty, we will provide, at no charge, replacement materials for, or refund the purchase price of, any product proven to be defective when used in strict accordance with our published recommendations and in applications considered by us as suitable for this product. The determination of eligibility for this warranty, or the choice of remedy available under this warranty, shall be made in our sole discretion and any decisions made by Pecora Corporation shall be final. This warranty is in lieu of any and all other warranties, expressed or implied, including but not limited to a warranty of merchantability or fitness for a particular purpose and in no case will Pecora be liable for damages other than those expressly stated in this warranty, including but not limited to incidental or consequential damages.

8. MAINTENANCE

If the sealant is damaged and the bond is intact, cut out the damaged area and prime with P-200 Primer and recaulk. If the bond has been affected, remove the sealant, clean and prepare the joint in accordance with the instructions under "Installation".

9. TECHNICAL SERVICES

Pecora representatives are available to assist you in selecting an appropriate product and to provide on-site application instructions or to conduct jobsite inspections. For further assistance call our Technical Service Department at 800-523-6688.

10. FILING SYSTEMS

- Sweet's Catalog File: www.sweets.com
- General Building
 - 07100 Waterproofing
 - 07920 Sealants
- Civil Engineering
 - 07100 Waterproofing



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