

# Urexpan NR-201

## Specification Data Sheet



Self-Leveling, Traffic-Grade and Traffic Loop Sealant

### 1. BASIC USES

- In small-to-medium width interior or exterior horizontal joints in plazas, malls, patios, swimming pool decks, meat and poultry plants, traffic detector loop sealants, copings, sidewalks, driveways, parking lots and garages.

### 2. MANUFACTURER

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

### 3. PRODUCT DESCRIPTION

NR-201 is a one part self-leveling, moisture-curing, isocyanate free sealant based on a unique hybrid STPU (Silyl-Terminated Poly Urethane) differentiating it from the standard urethane-based sealant. The silicone/urethane hybrid chemistry utilized by the NR-201 formula allows for a low odor, non-yellowing, one-part, moisture-curing, STPU sealant. It has been developed specifically for sealing dynamic joints between materials of dissimilar porosity, coefficients of expansion and surface textures, as well as embedding detector loop wire for traffic signals and parking gates. It cures to a medium modulus rubber with extraordinary adhesion, capable of accommodating joint movement of +25% of the original joint width. It also has excellent UV resistance in that it does not yellow, crack or craze on long term exposure to UV light. It has excellent abrasion resistance withstanding the rigors of pedestrian and vehicular traffic.

#### Advantages:

- STPU Chemistry
- Low VOC
- No shrinkage

- Minimal dirt pick-up
- Low Odor
- Non-yellowing
- Exceptional adhesion
- Non-gassing
- Long life
- Fast Cure
- Paintable
- USDA Certified
- DOT Approved

#### PACKAGING

- 30-oz. (887 ml) cartridges (10 per carton)
- 2-gallon (7.6 L) pails (special order)

#### COLOR

- Standard: Aluminum Stone, Limestone
- Non-Standard: Black  
(available in minimum batch quantities)

### 4. TECHNICAL DATA

**Applicable Standards:** Federal Specification TT-S-230C, Type I, Class A; and ASTM C-920, Type S, Grade P, Class 25, Use T, M, A, & O, USDA acceptance for use in meat and poultry processing plants.

### 5. INSTALLATION

Joints should be designed for a maximum of +/- 25% movement at the narrowest dimension for sealant to perform properly. It is essential to remove all traces of moisture, powder, dirt, dust, grease, oil, and other foreign matter. Methods of removal may include sandblasting, wire brushing, air blasting, or saw cutting. If the joint contains asphalt-impregnated fiberboard, this must be cut back to allow for proper backer rod or barrier beneath the sealant. There must be no contact between the sealant and any amount of asphalt or tar in dynamic moving joints, or adhesive failure may occur. NR-201 is acceptable for applications in static traffic loop saw cuts in both concrete or asphalt.

**Urexpan NR-201** is approved for use 1/2" wide joints with up to a 10% slope.

**Joint Backing:** A closed-cell polyethylene rod should be used as a backer for the NR-201. Use a size that will compress about 25% when inserted into the joint. In joints too shallow for backer rod, use a polyethylene bondbreaker tape to prevent three-sided adhesion of the sealant.

#### TYPICAL PHYSICAL PROPERTIES at 77°F (25°C), 50% RH

Test Property	Value	Test Procedure
Rheological, must self-level @ 40°F (5° C)	Passes	ASTM C639
Extrusion rate, (g/sec @ 50 psi)	<20	ASTMC603
Hardness, Shore A (25-50)	30	ASTM C661
Heat aging (max. 10% wt. loss)	7.8	ASTM C792
No cracking or chalking	Passes	Pecora Corporation
Tack-Free (max. 72 hrs)	<24	ASTM C679
Stain & Color change (No stain or color change)	Passes	ASTM C510
Dynamic Movement Capability, (%)		
Aluminum	+/-25	ASTM C719
Concrete*	+/-25	ASTM C719
Peel Adhesion (min. 5 pli)		
Aluminum	23	ASTM C794
Concrete*	23	ASTM C794
Accelerated weathering (No cracking)	Passes	ASTM C793
Arc resistance (seconds)	75	ASTM D495
Dielectric constant, 50 Hz	6.00	ASTM D150
500 Hz	4.90	

\*with P-75 Primer

**Priming:** NR-201 adheres well without primer to fully-cured concrete and aluminum; however, P-75 Primer is recommended on masonry in exterior applications for greater long-term adhesion and in interior applications where the sealant may be subject to standing water or complete immersion. Where surfaces such as brick, quarry tile, pavers, slate, or other decorative stones or other metals are to be sealed, contact Pecora Technical Services department (800-523-6688) for installation recommendations.

**Expansion and Control Joints:** 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).

**Traffic Detector Loops:**

1. Saw cut joint to desired dimensions.
2. Clear sawcut of excessive water and debris using oil-free compressed air. The joint should be clean and dry.
3. Install the required detector loop wire.
4. NR-201 Loop Sealant is supplied ready for application. It is quickly applied with bulk extrusion pumps or one-quart cartridge guns.
5. Apply the product directly into the prepared sawcut and encapsulate the detector wires. Keep the sealant 1/8" (3 mm) below the surface of the pavement.

**Cure Time:** Sealant is designed to be tack-free within 72 hours at 77°F. (25°C), 50% relative humidity (R.H). Since NR-201 is a moisture-curing sealant, higher R.H. will accelerate curing while a lower R.H. will tend to retard the curing. At normal temperature-humidity conditions, sealant will cure at approximately 1/8" (3 mm) per day.

**Cleaning:** Remove excess sealant promptly from hands and equipment using mineral spirits\*.

*\*(Solvent mentioned is toxic and flammable; observe manufacturers precautions and refer to Material Safety Data Sheets).*

**Storage Life:** 9 months from date of manufacture in original unopened bulk containers when stored below 80°F (27°C). 12 months from date of manufacture in original unopened cartridges when stored below 80°F (27°C).

**Precautions:** Contacts with uncured sealant or with vapors generated during curing MAY CAUSE RESPIRATORY TRACT IRRITATION. Avoid breathing vapor, mist, or dust. Keep container closed when not in use. Use only with adequate ventilation or wear an appropriate NIOSH-approved respirator. MAY CAUSE SKIN AND EYE IRRITATION. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. Ingestion may cause irritation of the intestinal tract. Refer to Material Safety Data Sheet (MSDS) for more information.

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

**6. AVAILABILITY AND COST**

Pecora products are available from our plants and warehouses, or from stocking distributors in all major cities. For the name and telephone number of your nearest representative call 800-523-6688 or visit our website at [www.pecora.com](http://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 installed in accordance with our published recommendations and in application considered by us as suitable for this product. This warranty is in lieu of any and all other warranties, expressed or implied, and in no case will Pecora be liable for incidental or consequential damages.

**8. MAINTENANCE**

If the sealant is damaged and the bond is intact, cut out the damaged area and recaulk. No primer is required. 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](http://www.sweets.com)
- General Building
  - 07100 Waterproofing
  - 07920 Sealants
- Civil Engineering
  - 07100 Waterproofing



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