



Technical Data Sheet

**Polyurethane Window & Door (0970),
Blacktop & Roof (0971), Masonry &
Concrete (0972)**

Description

A premium polyurethane based sealant series – designed for job specific applications – 0970 for Window & Door, 0971 for Blacktop & Roof & 0972 for Masonry & Concrete. All are one-component, moisture cure & are designed to meet the flexibility requirements of dynamically moving joints.

Key Features

- One-Component
- Permanently Flexible
- Extended Life Expectancy
- Excellent Adhesion
- Waterproof
- White designed for Window & Door
- Black designed for Blacktop & Roof
- Textured Limestone designed for Masonry & Concrete
- Paintable ***
- ASTM C920 Class 25, Fed 230C Class A
- VOC Compliant

Uses

0970 designed for Window & Door Frames, Vinyl, Wood, Aluminum or Fiber-Cement Siding, Air conditioners; **0971** designed for Asphalt & Blacktop Roof Shingles, Vents, Flashings, Expansion Joints, Driveway & Roof Cracks, Gutters, Leaders, Downspouts & Skylights; **0972** designed for Masonry & Concrete applications including Sidewalks, Steps, Concrete Driveways, Threshold Seals, Foundation Cracks, Expansion & Control Joints

Surface Preparation

Surface must be clean & dry & free of contaminants that could result in poor adhesion. Priming is often not required.

Directions

1. Before caulking, surface must be dry & free of dirt, dust, old caulk, grease & other contaminants that could impact performance.
2. Clip off tip of spout @ a 45 degree angle to desired size & puncture inner seal.
3. Load cartridge into caulking gun & apply, forcing sealant into joint.
4. Clean up excess with a solvent-moistened towel prior to cure. Excess cured caulk can be removed with a single edge razor blade. Avoid undercutting the seal. (See additional information under *For Best Results & Limitations*)
5. Clean tools with Mineral Spirits, Toluene or Xylene.
6. Paintable when fully cured. Check with paint manufacturer if planning to use oil base paint as some oil base paints do not dry well over Polyurethane Sealants. ***

<u>Physical/Performance Property</u>	<u>Test Method</u>	<u>Typical Result</u>
Weight Per Gallon	Gardner Cup	9.75 lbs/gallon +/- 1.0
Specific Gravity	Calculated	1.17
Total Non Volatile % Solids (Weight)	Computrac Analyzer	92% +/- 2
Extrudability/Application (as packaged)	Semco Gun (6 oz @ 50 psi)	60 seconds +/- 15 sec @ 77F
Consistency/Appearance	Visual Observation	Viscous Paste – Smooth or Textured
Odor	Subjective	Solvent
Base Polymer	Known	Polyurethane Based Formulations
Pigment	Known	Calcium Carbonate/TiO ₂
Flash Point	Closed Cup	166F (74C)
Freeze/Thaw Stability	Test Lab 0 F/77 F @24 hrs or ASTM C731	Passes 5 Cycles
Shelf Life	Lab 50 C Oven – Accelerated	Expect 1 Yr @ 77F
Slump	ASTM D2202 Jig	< 0.15
Artificial Weathering	ASTM – QUV Tester	No degradation @ 5000 hrs QUV *
Flexibility	ASTM 734	Pass – Excellent
Tack Free Time	ASTM D2377	2 hrs (temp/humidity may prolong)
Shore A Hardness	ASTM D2240	25 +/- 5
Storage Conditions	Test Lab	Store in cool, dry place < 90F
Application Temperature	Test Lab	40F to 110F (5C to 32.2C)
Service Temperature	Lab Oven/QUV/Freezer/OE Fence	-40F to 200F (-18C to 94C)
Tooling	Test Lab/Field Evaluation	Excellent immediately – avoid skin
Paintability	Test Lab/Field Evaluation	Excellent @ cure; premium latex paint
Full Cure	Test Lab/Field Evaluation	24 to 48 hrs (3/16 bead) **
Stain Index	ASTM D2203	1
% Elongation @ Break	Instron Tensile Tester – ASTM D412	~650% (smooth); ~550% (textured)

Clean Up

Clean tools with Mineral Spirits, Toluene or Xylene before cure – avoid getting sealant on skin. (See solvent manufacturer's precautions/directions)

For Best Results

- Wear gloves to avoid skin contact
- Prepare surface properly prior to application
- Store sealant in a cool, dry place (<90F) prior to use
- Apply when sealant & substrate are between 40F & 110F
- Use dry tooling; avoid wet tooling such as use of water or soapy water
- Paint with premium latex paint when sealant fully cured. Some oil base paints may not dry properly over Polyurethane Sealants ***
- More joint movement can be accommodated in a thin bead of sealant than a thick bead. Sealant should be no thicker than ½ inch & no thinner than ¼ inch. In joints between ½ inch & 1 inch, the ratio of sealant width to depth should be approximately 2 to 1. Sealant depth in joints between ¼ inch & ½ inch should be ¼ inch deep. Joints with dynamic movement should not be designed in widths less than ¼ inch.
- Excess sealant should be dry-wiped from all surfaces while still uncured, following with a solvent such as Toluene or Xylene (follow solvent manufacturer's cautions & recommendations) – Should sealant begin to cure on adjacent porous surfaces, excess sealant should be allowed to progress through initial cure or setup, then removed promptly by abrasion or other mechanical means CURED SEALANT IS USUALLY VERY DIFFICULT TO REMOVE WITHOUT ALTERING OR DAMAGING THE SURFACE TO WHICH THE SEALANT HAS BEEN MIS-APPLIED.
- Polyurethane Sealant should not be used on most plastics – Acrylic (Plexiglas), Polycarbonate (Lexan), PVC or ABS

Color

0970 Window & Door – White
0971 Blacktop & Roof – Black
0972 Masonry & Concrete – Limestone, Textured

Packaging

Spiral cartridge, foil liner, metal plunger; 10.1 Fl. Oz.

Limitations

- Allow minimum 24 hrs drying time prior to painting (lower temperature & humidity will extend cure time) ** DO NOT PAINT UNTIL FULLY CURED
- Uncured sealant may cause skin, eye & respiratory system irritation
- Use only in well ventilated areas
- Polyurethane Sealants exposed to UV will typically yellow on surface only & lose glossy appearance *
- Do not apply over damp, contaminated surfaces (Dampness or surface w/ high moisture will cause extensive curing in a short period of time, resulting in bubbling in the sealant
- Porous substrates such as (but not limited to) Marble, Limestone & Granite may be stained by the sealant
- Smearing or feathering over joints is not recommended
- Sealant not recommended for horizontal joints or traffic-bearing joints where abrasion resistance is required
- Sealant is not recommended for continuous immersion in water or any other liquid. Avoid exposure to fuels, chlorinated, acids & alkaline solutions
- During cure, do not expose sealant to curing silicone sealants
- Not recommended for use on log homes
- Not recommended for use w/ Polystyrene Foams
- Sealant not recommended for glazing applications (bond strength can be affected by UV through glass)

Environmental, Safety & Transportation Information

<u>Criteria</u>	<u>Evaluation Method</u>	<u>Status</u>
CARB Compliance	Documents Review	YES
Prop 65 Ingredients	Documents Review	YES (See MSDS)
DOT Proper Shipping Name	Review of Regs	Not regulated by DOT
DOT Hazard	Review of Regs	Not regulated by DOT
DOT UN/NA Number	Review of Regs	Not regulated by DOT
Packing Group	Review of Regs	N/A
VOC Content	Calculated	<3.90%/weight (<50 g/L)

CAUTION: NOT FOR INTERNAL CONSUMPTION. KEEP OUT OF REACH OF CHILDREN & PETS. KEEP FROM FREEZING (See MSDS for additional information). WARNING: This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

LIMITED WARRANTY

Recommendations for use of this product are based on tests we believe to be reliable. Manufacturer and seller are not responsible for results where this product is used under conditions beyond our control. If when applied as directed, this material peels, cracks or separates, it will be replaced without charge upon presentation of proof of purchase and used cartridge. This limited warranty only applies to residential use and damages including consequential damage and other remedies are excluded. No other warranties apply, including fitness for a particular purpose.

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SEE MSDS FOR ADDITIONAL DATA/INFORMATION