



Technical Data Sheet

RD PRO Silicone Sealant – 0816/OI, 0826/OI Series

Description

A high-performance 100% silicone sealant ideal for Industrial, OEM & Maintenance applications. Spec-compliant formula available in Clear, White & various other colors. Cures upon exposure to moisture in the air. Not paintable.

Key Features

- Meets various performance specifications: ASTM C920 Class 25, Fed Specs TT-S-00230C Class A and TT-S-001543A, CEBTP 432.6 140-2, Mil Spec 46106A, CGSB 19C9-9B, DIN 18540 Part 2, OREX 150031-2.
- Underwriters Laboratories Recognized Component
- NSF Listed Product
- Meets requirements of FDA regulation Code of Federal Regulations 21 CFR concerning food contact applications if used in accordance w/ 21 CFR Sec. 177.2600. "Rubber articles intended for repeated use".
- Tenacious Adhesion
- VOC Compliant

Uses

Ideal for making formed-in-place gaskets, product provides excellent adhesion to Glass, Fiberglass, Non-oily woods, most metals, Porcelain, Ceramic Tile, Most painted surfaces, many plastics & rubbers.

Surface Preparation

Surface should be completely clean, dry & free of contaminants such as dirt, dust, grease, oil & other residue or material that may interfere with adhesion. Remove mildew by scrubbing with a solution of 4 oz. TSP (Trisodium Phosphate), 1 quart of liquid bleach mixed with 3 quarts of warm water. Protect eyes & hands by wearing goggles/face shield & chemical resistant gloves. Thoroughly rinse surface & allow to dry completely prior to sealant application.

Directions

1. Clip off tip of spout @ a 45 degree angle to desired size.
2. Apply using steady, even pressure to completely bridge joints.
3. Smooth sealant for a neat appearance.
4. Wipe away excess with a dry cloth or towel before surface skins.
5. After cure, carefully remove with a razor blade, taking care not to undercut sealant bond to substrate or apply Red Devil Caulk Remover & follow label directions.

<u>Physical/Performance Property</u>	<u>Test Method</u>	<u>Typical Result</u>
Weight Per Gallon	Gardner Cup	8.50 +/- 0.50
Specific Gravity	Calculated	0.96 to 1.08
Total Non Volatile % Solids (Weight)	Computrac Analyzer	> 93%
Extrudability/Application (as packaged)	Semco Gun (6 oz @ 50 psi)	60 seconds +/- 10
Consistency/Appearance	Visual Observation	Smooth, viscous paste
Odor	Subjective	Vinegar (Acetic Acid)
Base Polymer	Known	Proprietary Siloxane blend
Pigment/Filler	Known	Amorphous Fumed Silica
Freeze/Thaw Stability	Test Lab 0 F/77 F @24 hrs or ASTM C731	Passes 5 Cycles
Shelf Life	Lab 50 C Oven – Accelerated	Minimum 1 Yr @ 72F
Slump	ASTM D2202 Jig	0
Artificial Weathering	ASTM – QUV Tester	No Change @ 5,000 hrs QUV
Low Temperature Flexibility	ASTM D746	Pass
Tack Free Time	ASTM D2377	20 minutes
Cure Time	Test Lab (77F/25C 3 mm thickness)	24 hrs (cures approx 1/8 in/24 hrs)
Shore A Hardness	ASTM D2240	27 +/- 3
Elongation @ Break/Ultimate Tensile	Instron Tensile Tester	500% minimum/450psi +/- 25 psi
Storage Conditions	Test Lab	40F to 90F – Original Container
Application Temperature	Test Lab	10F to 100F
Service Temperature	Lab Oven/QUV/Freezer/OE Fence	-60F to 400F (Inter. 500F full cure)
Tooling	Test Lab/Field Evaluation	Excellent @ 5 to 10 minutes
Paintability	Test Lab/Field Evaluation	Not Paintable
Joint Movement Capability	Test Lab	+/- 25% (50% Total Movement)
Dielectric Strength	Test Lab (D887/D149)	22 KV/MM
Dielectric Constant	Test Lab (D924/D150 @ 1 MHZ)	2.7
Dissipation Factor	Test Lab (D924/D150 @ 1 MHZ)	0.002
Volume Resistivity (X CM)	Test Lab	2 X 10 to the 15 th power
Coverage	Test Lab	~ 55 linear feet @ 3/16" bead

Clean Up

Wipe excess with dry towel or paper towel prior to cure. Wash skin with mild soap & water. Clean tools with mineral spirits prior to cure. Cured sealant may be removed using a razor blade taking care not to undercut seal to substrate.

For Best Results

- Complete all painting prior to sealant application (sealant not paintable)
- Avoid applications of total confinement as sealant cures through contact with atmospheric moisture.
- Complete tooling of applied bead within 5 to 10 minutes.
- If masking tape is used to assure a straight edge bead it must be removed prior to formation of tack free skin (typically 10 to 20 minutes).
- Use with adequate ventilation as sealant gives off acetic acid (vinegar-like odor) during application & cure. (No odor present following complete cure)
- Applications involving confinement should be evaluated fully prior to commercialization, as atmospheric moisture (humidity) is required for cure to take place.

Environmental, Safety & Transportation Information

Color

Clear (Translucent), White, Almond, Bronze, Gray, Black

Packaging

10.1 oz. HDPE Cartridge, 2.8 oz. metal squeeze tube

Limitations

- Sealant not paintable. Complete all painting prior to sealant application.
- Not recommended for full-time water immersion applications.
- Not recommended for application in totally confined areas as atmospheric moisture is required for sealant cure.
- Sealant does not adhere well to Teflon coated materials, Polyethylene, Polypropylene or Methylmethacrylate (Plexiglas).
- Not for use on or near sensitive metals such as Copper, Brass, Zinc, Carbon Steel, Galvanized Iron or Magnesium as corrosion may occur during sealant's acetic acid release.

<u>Criteria</u>	<u>Evaluation Method</u>	<u>Status</u>
CARB Compliance	<i>Documents Review</i>	Yes
Prop 65 Ingredients	<i>Documents Review</i>	None
DOT Proper Shipping Name	<i>Review of Regs</i>	Not Regulated by DOT
DOT Hazard	<i>Review of Regs</i>	N/A
DOT UN/NA Number	<i>Review of Regs</i>	N/A
Packing Group	<i>Review of Regs</i>	N/A
VOC Content	<i>Calculated</i>	< 3%/wt, < 30 g/L

CAUTION: NOT FOR INTERNAL CONSUMPTION. KEEP OUT OF REACH OF CHILDREN & PETS. KEEP FROM FREEZING. DIRECT CONTACT WITH UNCURED SEALANT IRRITATES EYES & MAY IRRITATE SKIN. SEVERITY INCREASES WITH PROLONGED CONTACT. OVEREXPOSURE TO VAPOR MAY IRRITATE EYES, NOSE & THROAT. AVOID BREATHING OF VAPOR. PROVIDE ADEQUATE VENTILATION TO MAINTAIN VAPORS BELOW DISCOMFORT LEVEL. IN CASE OF INHALATION ILL EFFECTS, REMOVE TO FRESH AIR. SEALANT RELEASES ACETIC ACID VAPOR (VINEGAR ODOR) DURING APPLICATION & CURE. DO NOT HANDLE CONTACT LENSES WITH SEALANT ON HANDS. FULLY CURED SEALANT IS NON-HAZARDOUS. (See MSDS for additional information)

Contains Titanium Dioxide; added to Massachusetts Right to Know List, Minnesota Hazardous Substance List, New Jersey Right to Know List, Pennsylvania Right to Know List & Rhode Island Hazardous Substance List.

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.

TDS Number: 0816/OI, 0826/OI Series TD

Date of Issue: January 16, 2014 (Reduced VOC's g/L to 30 g/L)

SEE MSDS FOR ADDITIONAL DATA/INFORMATION