

Poly-Sil 100% RTV Silicone

Technical Data



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Technical Data Sheet / Bulletin

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Poly-Sil – 100% RTV Silicone Sealant

Packaging: 6 fluid ounce cartridge (178.5 mL), 12 cartridges per case.

Coverage: 1/8" x 1/8" bead, 52 linear feet (3mm bead, 15.84 linear meters)

Product Description:

Poly-Sil is a mildew resistant, single component RTV silicone sealant. This professional grade acetoxycure silicone sealant is VOC compliant. Poly-Sil is produced in solid and particulated colors. Poly-Sil is a great solution for a wide range of applications. It provides a watertight, flexible seal that won't crack, crumble, or shrink. Once cured, its temperature range is -40°F to 400°F.

Suggested Uses:

Caulking and Sealing

Wall Systems
Trim and Moldings
Solid Surface
Quartz Surfaces
Granite
Marble
Flooring
Sinks and Plumbing Fixtures
Kitchen/Bath Areas
Shower Stalls

Adheres To:

FRP/FRL Panels
Painted Surfaces
Primed and Painted Metals
Glass
Ceramic
Porcelain
Most Fabric/Textiles
Laminates
Non-oily Woods
Cultured Marble
Granite/Quartz
Most Metals*

**Not recommended for use on brass, copper, unpainted or unprimed metals, or surfaces prone to attack by weak acid.*

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Common Limitations:

- Joints where abuse and abrasion are expected to be encountered.
- Joints should be above grade and not exposed to prolonged water immersion.
- Building materials that may bleed oils, plasticizers, or solvents. (Impregnated wood, green or partially vulcanized rubber, etc.)
- Substrate and joint should be acclimated to the current application to reduce shifting, separation, shrinking or expansion.
- Silicone should be applied with air temperature between -40°F and 100°F.
- Store in a dry place with temperatures below 80°F.
- Surfaces that will require painting; Poly-Sil is not paintable.
- Certain porous materials. Surface may show slight dark stained areas due to oil from silicone.
- Many factors beyond Color Rite's control and uniquely within user's knowledge and control may affect the use and performance of the Silicone in a particular application. The user is solely responsible for evaluation the product and determining whether it is fit for the user's particular purpose and adequately maintained.

TYPICAL PROPERTIES

CURE SYSTEM	SINGLE COMPONENT ACETOXY	
PHYSICAL PROPERTIES	(cured) RUBBER	
SPECIFIC GRAVITY	1.04	
EXTRUSION RATE, g/min	350	ASTM C-603
SAG or SLUMP	Nil	
MODULUS	Medium	ASTM D-412
TENSILE	1.8	ASTM D -412
ULTIMATE TENSILE	310 psi	
SKIN OVER TIME	Approximately 5 minutes	
TACK FREE TIME	20 min	ASTM C-679
TOOLING TIME	Up to 5 minutes	
CURE RATE	1/8" per 24 hours	
SHORE A HARDNESS, STANDARD GLOSS	25	ASTM C-661
SHORE A HARDNESS, SATIN FINISH	30	
SHORE A HARDNESS, SANDED TEXTURE	28	
ELONGATION %	500	ASTM D-412
DYNAMIC JOINT MOVEMENT	+/- 25%	ASTM C-719
ADHESION	15-100%CF 015P33B	
TEAR STRENGTH	25ppi	
PEEL STRENGTH	20ppi	ASTM C-794
WEATHERABILITY, 6000 hours weatherometer	No Change	
VOC CONTENT	29.86 g/l	

All properties retrieved from lab conditions, 77°F at 50% humidity.

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Preparation for All Applications:

- Areas to be sealed should be thoroughly clean and dry. Remove all substances that inhibit silicone adhesion. Remove oils, soap, glue/adhesive debris, dust, loose caulk, solvent residue/residual.
- Joint width or depth should not exceed ½ inch. If joint depth exceeds ½ inch, use backer rod material.
- Application needs an area where silicone would be allowed to fully and properly cure, avoid completely enclosed or confined spaces.

Poly-Sil color will not change as product cures. It is recommended that you test product prior to installation.

Application Directions:

1. Completely prepare area for applications, see guidelines above.
2. Apply tape to both sides of joint to create a straight edge. If you do not want to deal with the hassle of tape and want professional results, use COLOR RITE'S PRE-TOOLING MIST and PERFECT BEAD TOOL.
3. Cut cartridge tip just above threads.
4. Thread nozzle onto cartridge.
5. Cut nozzle to desired bead size.
6. Apply silicone sealant to desired area.
7. Tool as desired immediately after application. Tooling should be done in a timely manner to avoid skin over. Silicone will start to skin over as soon as 5 minutes, dries to touch in 1 hour, and cures 1/8" in 24 hours. Allow 7 days for maximum cure.

Silicone Removal:

- Uncured – Clean unwanted silicone using a commercial solvent such as xylol, touol, or methyl ethyl ketone.
- Cured – Removal must be performed by mechanical means, such as razor knife.

Storage and Shelf Life – Unopened:

- Poly-Sil has an optimum shelf life of 9 months, when stored in original unopened cartridge, stored at or below 80°F. and 50% relative humidity.
- All cartridges are clearly marked with an expiration date.
- Poly-Sil has tested to be a useable product up to one year after manufacture date.
- Refrigeration will help extend shelf life.

Precautions:

- Causes skin irritation.
- Causes serious eye irritation.
- Wash face, hands, and skin thoroughly after handling; if concerned, seek medical advice/attention.
- Wash contaminated clothing after use.
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do, continue rinsing. If eye irritation persists, get medical advice/attention.
- IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs, get medical advice/attention.
- **EMERGENCY PHONE NUMBER INFOTRAC 800-535-5053 / 352-323-3500**