



PG RedHT™ Silicone | Premium High Temperature Silicone Adhesive | UV Resistant | Waterproof

Manufactured by Polygem, 5600 Lower Macungie Rd. | Macungie, PA 18062 | 630-231-5600 | Made in USA

POLYGEM
polygem.com

TB - TECHNICAL BULLETIN

PRODUCT DESCRIPTION

PG RedHT™ Silicone is a premium one-part high temp adhesive sealant that withstands extreme heat from -62 to 500°F (-52 to 260°C), with intermittent exposure to 650°F (343°C). It bonds tightly to metal, tile, glass, ceramic, and more—creating strong, waterproof, and airtight seals. Ideal for demanding jobs indoors or out, it's weather-resistant, VOC-Compliant, and meets Green Building Standards.

ADVANTAGES

- **High Temperature Performance**
- **UV Resistant**
- **Excellent Weatherability**
- **VOC-Compliant**
- **Non-Yellowing**
- **Non-Flammable**
- **Waterproof**
- **Non-Shrinking**

RECOMMENDED USES

PG RedHT Silicone is for the making of gaskets in heating and refrigeration units, applying brackets or nameplates, sealing windows, anti-abrasion coating, sealing marine cabinets, caulking joints and applying ceramic wear tiles. Also a sealant for venting high efficiency furnaces.

PG RedHT Silicone is also used in the following applications;

- Sealing and Glazing
- Flues & Venting
- HVAC/R
- Plumbing
- Appliance Trim
- Kitchen & Bath
- Furnace & Fireplace
- Roofing
- Interior/exterior
- Transportation Seals

APPLICATION INSTRUCTIONS

Note: Surfaces must be clean, dry and free of dirt and oil and loose material. DO NOT apply if frost is present.

- 1. Prepare Cartridge:** Cut the nozzle tip to the desired bead size (smaller opening for fine beads, larger for filling gaps). Pierce the inner seal if present, then load the cartridge into a caulking gun.
- 2. Apply Sealant:** Hold the gun at roughly a 45° angle to the surface. Push the bead forward so the nozzle forces the silicone into the joint or gap, ensuring good contact with both sides. Maintain steady, even pressure for a consistent bead.
- 3. Tool the Bead:** If bead needs to be adjusted it must be done within 5-10 minutes of application, smooth or shape the sealant with a putty knife, gloved finger, or finishing tool to ensure full adhesion and a neat appearance. Remove any excess immediately before curing begins.
- 4. Curing:** Silicone will skin over in approximately 30 minutes. Allow 24 hours for full cure and strength before placing into service. Thicker applications or low-humidity conditions may extend cure time.
- 5. Cleanup:** Wipe away uncured material with a clean cloth. If unwanted silicone has already cured, silicone must be cut or scraped away.

PACKAGING

PG RedHT Silicone is available in a 10.3 oz. (305 ml) tube.

STORAGE

Store in temperatures between 60-85°F (16-22°C)
Keep from freezing.

LIMITATIONS

Not for use on wet or oily surfaces.
DO NOT use if frost is present.

CAUTIONS

Wear chemical goggles and NIOSH approved respirator. Wear proper protective clothing and gloves to prevent direct contact of resins. Consult Material Safety Data Sheet for full listing protective requirements.

PG RedHT™ Silicone may irritate eyes and skin. Avoid contact with eyes or prolonged contact with skin.

For professional use only.

Keep out of reach of children

MEETS THE FOLLOWING SPECIFICATIONS

ASTM C920 Type S, Grade NS, Class 25; TT-S-00230C (COM-NBS), TT-S01543A (COM-NBS), MIL-A-46106A, FDA CFR 177.2600, USDA Approved, NSF 51, UL Recognized Component.

TECHNICAL DATA

TYPICAL PROPERTIES | All values measured after 7 days at 73 °F (23 °C).

Cure System	Acetoxo
Movement Capability, % (ASTM C-719)	±25%
Modulus (ASTM D-412)	Medium
Temperature Range:	-62 to 500°F (-52 to 260°C) Intermittent 650°F (343°C)
Working Time: (73°F - 23°C)	10 min.
Tack Free: (73°F - 23°C)	20 min.
Full Cure Time: (73°F - 23°C)	24 hrs.
Specific Gravity:	1.04
Extrusion Rate: (ASTM C-1183)	370 g/min.
Tensile Strength: (ASTM D-412)	310 p.s.i.
Elongation: (ASTM D-412)	500%
Shore A Hardness: (ASTM C-661)	26
Dielectric Strength: (kv/mm (v/mil))	20(500)
Dielectric Constant: (at 100 Hz)	2.9@60
Volatile Organic Content:	30 gr./liter
Color:	Red

POLYGEM LIMITED WARRANTY:

Polygem warrants that during the shelf life of the product (as determined from the date of manufacture), the product will conform to the specifications provided in this technical bulletin. **POLYGEM MAKES NO OTHER WARRANTIES, EXPRESSED, IMPLIED, OR STATUTORY, INCLUDING WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.** Neither any performance or other conduct, or any oral or written representation, statement or advice provided by Polygem or any of Polygem's distributors, agents, or employees will create a warranty, or in any way increase the scope or duration of this limited warranty. Polygem will have no warranty obligation if the product becomes defective, in whole or in part, as a result of: (i) the transportation of the product; (ii) any alteration or modification to the product by third parties; or (iii) improper handling or storage of the product (including improper handling or storage by third-party carriers or distributors).

012226 | Data sheets are subject to change without notice.