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## **Technical Data Sheet**

# Permatex® Clear RTV Silicone Adhesive Sealant

Revised 02/19

#### PRODUCT DESCRIPTION

Permatex<sup>®</sup> Clear Silicone Adhesive Sealant is a general purpose, single component, room temperature vulcanizing (RTV) compound, designed for the sealing of mechanical assemblies. Upon curing from the exposure to moisture in the air, this non-sagging paste forms a tough, flexible, waterproof seal of silicone rubber, which resists aging, weathering and thermal cycling without hardening, shrinking or cracking.

#### **PRODUCT BENEFITS**

- Easy application
- Applied to horizontal or vertical surfaces
- Superior adhesion and flexibility
- Waterproofs
- Insulates
- Unaffected by vibration
- Non-flammable
- Non-toxic

#### TYPICAL APPLICATIONS

Permatex<sup>®</sup> Clear Silicone Adhesive Sealant is an excellent allpurpose adhesive/sealant for the following materials:

- Metal
- Glass
- Wood
- Plastic
- Silicone resin
- Vulcanized silicone rubber
- Ceramics
- Natural and synthetic fibers
- Painted surfaces

Bonds, seals, repairs, mends and secures:

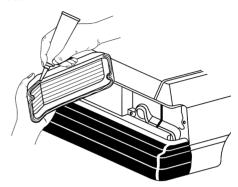
- Lens housings
- Windshields (not for installation)
- Windows
- Door frames
- Vinyl tops
- Housings and covers

### **DIRECTIONS FOR USE**

#### For Assembly

- Remove all previous material from mating surfaces. Permatex<sup>®</sup> Gasket Remover is recommended for most materials, not for plastics or painted surfaces.
- For best results, clean and dry all surfaces with a residuefree solvent, such as Permatex<sup>®</sup> Brake and Parts Cleaner.
- 3. Cut nozzle to desired bead size, 1/16" to 1/4" in diameter. A 1/8" bead is usually sufficient for most applications.

- Remove cap, puncture tube or cartridge seal and attach extension nozzle.
- Apply a continuous and even bead of silicone to one surface.



- Assemble parts immediately while silicone is still wet. Secure or tighten as required, avoiding excessive squeeze-out.
- Pressure should be applied to parts for 24 hours until the silicone is fully cured.

#### Instructions for PowerBead™

- 1. Clean and dry all flange surfaces to be sealed.
- 2. Remove black cap from top of extension nozzle.
- Turn nozzle extension one complete turn (360°) counterclockwise.
- 4. Depress finger trigger and apply a continuous 1/16 inch to 1/8 inch PowerBead to one surface.
- Apply a continuous and even bead of silicone to one surface.
- Assemble parts immediately while silicone is still wet. Secure or tighten as required, avoiding excessive squeeze-out.
- Pressure should be applied to parts for 24 hours until the silicone is fully cured.
- 8. To close, turn extension nozzle clockwise until tight (about one full turn). Wipe off excess material from nozzle and replace black cap.

#### **Storage of Unused Product**

- Create a "Silicone Plug" by allowing excess material to extend beyond the extension nozzle or aerosol tip to cure, sealing and protecting the remaining product from moisture. For reuse, simply remove the cured product from the tip.
- For PowerBead<sup>™</sup> dispensers, you may store remaining product using either the above "silicone plug" method or using the included plastic cap.

#### For Cleanup

- Remove uncured product from parts and hand-tools with Permatex® Brake and Parts Cleaner. If skinned over, break film with a dry cloth to remove as much as possible. Remove the remaining material with Permatex® Gasket Remover.
- 2. Clean hands with a dry cloth or Permatex® Fast Orange® hand cleaner.

# PROPERTIES OF UNCURED MATERIAL

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Chemical Type	Acetoxy silicone rubber
Appearance	Clear, non-sag paste
Odor	Mild acetic
Specific Gravity	1.01
Extrusion rate @ 25°C, (grams/min)	>220
Flash Point °C, °F	>93 (>200)

### **TYPICAL CURING PERFORMANCE**

Permatex<sup>®</sup> Clear RTV Silicone Adhesive Sealant cures on exposure to moisture in the air. The product cures tack free in 1 hour and fully cures in 24 hours. Cure times will vary with temperature, humidity and gap. Note: The curing process can cause corrosion to some surfaces, for critical applications use the Ultra Series silicones.

#### PERFORMANCE OF CURED MATERIAL

After 7 days at 25°C (77°F), 50% Relative Humidity

	Typical Values	
Hardness (Shore A)	>20	
*Elongation, %	>350	
**Tensile Strength, N/mm² (psi)	>1.5	(>218)

<sup>\*</sup>Material will stretch 3.5 times its original length before breaking.

# TYPICAL ENVIRONMENTAL RESISTANCE Temperature Resistance Typical Values

Continuous, °C (°F)	-59 to 204	(-75 to 400)
Intermittent, °C (°F)	-59 to 260	(-75 to 500)

#### **GENERAL INFORMATION**

This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be selected as a sealant for chlorine or other strong oxidizing materials.

For safe handling information on this product, consult the Material Safety Data Sheet, (MSDS).

#### ORDERING INFORMATION

Part Number	Container Size	
80050	3 oz. tube, carded	
80855	11 oz. cartridge	
85913	7.25 oz. PowerBead	

#### STORAGE

Products shall be ideally stored in a cool, dry location in unopened containers at a temperature between 8° to 28°C (46° to 82°F) unless otherwise labeled. Optimal storage is at the lower half of this temperature range. To prevent contamination of unused product, do not return any material to its original container.

#### NOTE

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<sup>\*\*</sup>Amount of force required to break material.