

Permatex®

A Brand of **IRVING-CLOUD**

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Technical Data Sheet

Permatex® Clear RTV Silicone Adhesive Sealant

INDUSTRIAL

PRODUCT DESCRIPTION

S.I.N.: 834-300

Permatex® Clear Silicone Adhesive Sealant is a general purpose, single component, room temperature vulcanizing (RTV) adhesive/sealant 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. Conforms to MIL-A-46106B, Type I. Permatex® Clear RTV Silicone Adhesive Sealant shall meet the requirements of the F.D.A. 'Code of Federal Regulations 21 CFR' concerning food contact applications if used in accordance with its Section 177.2600: 'Rubber Articles Intended for Repeated Use'.

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® Clear Silicone Adhesive Sealant is an excellent all-purpose adhesive/sealant for the following materials:

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

DIRECTIONS FOR USE

For Assembly

1. Remove all previous material from mating surfaces. Permatex® Gasket Remover is recommended for most materials, not for plastics or painted surfaces.
2. For best results, clean and dry all surfaces with a residue-free solvent, such as Permatex® 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.
4. Remove cap, puncture tube @ cartridge seal and attach extension nozzle.
5. Apply a continuous and even bead of silicone to one surface.

6. Assemble parts immediately while silicone is still wet. Secure or tighten as required, avoiding excessive squeeze-out.
7. 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.
3. 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.
5. Apply a continuous and even bead of silicone to one surface.
6. Assemble parts immediately while silicone is still wet. Secure or tighten as required, avoiding excessive squeeze-out.
7. 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

1. 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.
2. For PowerBead™ dispensers, you may store remaining product using either the above "silicone plug" method or using the included plastic cap.

For Cleanup

1. Remove uncured product from parts and hand-tools with Permatex® EnviroSafe® ODC Free Cleaner/Degreaser. 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

	Typical Value
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)

NOT FOR PRODUCT SPECIFICATIONS.

THE TECHNICAL DATA CONTAINED HEREIN ARE INTENDED AS REFERENCE ONLY.

PLEASE CONTACT PERMATHEX, INC., TECHNICAL SERVICE DEPARTMENT FOR ASSISTANCE AND RECOMMENDATIONS FOR YOUR SPECIFIC APPLICATION.
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TYPICAL CURING PERFORMANCE

Permatex® 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/mm ² (psi)	>1.5	(>218)

*Material will stretch 3.5 times its original length before breaking.

**Amount of force required to break material.

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 (66BR)	3 oz. tube, carded
80855 (66C)	11 oz. cartridge
81913	7.25 oz. automatic tube
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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