Toll Free: 87 PERMATEX
(877-376-2839)

10 Columbus Blvd., Hartford, Connecticut 06106

6875 Parkland Boulevard, Solon Ohio 44139

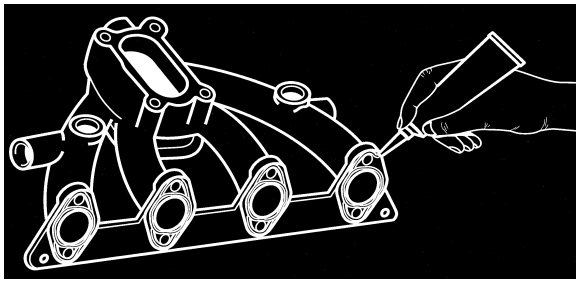
Technical Data Sheet

Permatex® Sensor-Safe High-Temp RTV Silicone Gasket

AAM Revised 08/02

PRODUCT DESCRIPTION **S.I.N.: 834-300**

Permatex® Sensor-Safe Hi-Temp RTV Silicone Gasket is a single component, room temperature vulcanizing gasketing compound designed to provide reliable "formed-in-place" gaskets for mechanical assemblies. This material cures on exposure to moisture in the air to form a tough, flexible, silicone rubber gasket. The product resists aging, weathering and thermal cycling without hardening, shrinking or cracking. Designed to be oxygen sensor safe, and maintain maximum performance in a continuous temperature environment of 600°F.



PRODUCT BENEFITS

- High temperature use
- Sensor safe
- Easy application
- Superior adhesion and flexibility
- Replaces most cut gaskets
- Can be used as a gasket maker or dressing
- Non-flammable

TYPICAL APPLICATIONS

- Intake manifolds
- Thermostat housings
- Valve covers
- Timing gear covers
- Water pumps
- Oil pans
- Transmission pans

DIRECTIONS FOR USE

For assembly as a form-in-place gasket

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. An 1/8" bead is usually sufficient for most applications.
4. Remove cap, puncture tube or cartridge seal and attach extension nozzle.
5. Apply a continuous and even bead of silicone to one surface, first tracing the internal areas of the gasket configuration, then all surrounding bolt holes as shown below:
6. Assemble parts immediately while silicone is still wet. Secure or tighten to recommended torque specs.
7. Re-torque will not be necessary after the product has cured.

For assembly as a gasket dressing

1. Repeat steps 1 thru 4 as in previous section.
2. Apply a thin film of silicone to one surface to be sealed.
3. Place the pre-cut gasket onto silicone film.
4. Apply a second thin to pre-cut gasket surface.
5. Remove any excess and assemble parts immediately. *Note: Product not recommended for use as a cylinder head gasket or head gasket sealant.*

For Cleanup

1. Allow 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. Remove uncured product from parts and hand-tools with a dry cloth, if skinned over, break film with a dry cloth to remove as much as possible, and remove the remaining material with Permatex® Gasket Remover as previously stated.
3. Clean hands with a dry cloth or Permatex® Fast Orange® hand cleaner.

PROPERTIES OF UNCURED MATERIAL

	Typical Value
Chemical Type	Acetoxy silicone rubber
Appearance	Red non-sag paste
Odor	Mild acetic
Specific Gravity	1.05
Extrusion rate @ 25_C, (grams/min)	>100
Flash Point _C (_F)	>93 (>200)

TYPICAL CURING PERFORMANCE

Permatex® Sensor-Safe Hi-Temp RTV Silicone Gasket cures on exposure to moisture in the air. The product dries tack free in one 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)	>18	
Elongation, %*	>300	
Tensile Strength, N/mm^2 (psi)**	>1.2	(>174)

*Material will stretch 3 times its original length before breaking.

**Amount of force required to break material.

TYPICAL ENVIRONMENTAL RESISTANCE

Temperature Resistance	Typical Values	
Continuous, °C (°F)	-54 to 316	(-65 to 600)
Intermittent, °C (°F)	-54 to 343	(-65 to 650)

Chemical / Solvent Resistance

The product retains effective properties in contact with automotive fluids, such as motor oil, transmission fluids, alcohol and antifreeze solutions. Note: Not recommended for parts in contact with gasoline.

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
81422 (27BR)	3 oz. tube, carded
81686 (27C)	11 oz. cartridge

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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