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## Technical Data Sheet

# Permatex® Water Pump & Thermostat RTV Silicone Gasket

AAM Revised 06/13

### PRODUCT DESCRIPTION

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

Permatex® Water Pump & Thermostat 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. Provides the highest water-glycol resistance available in an RTV silicone.

### PRODUCT BENEFITS

- Sensor safe, non-corrosive
- Superior adhesion and flexibility
- Easy application
- Replaces most cut gaskets
- Can be used as a gasket maker or dressing
- Non-flammable
- Non-toxic

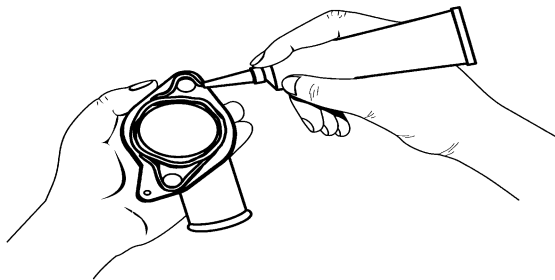
### TYPICAL APPLICATIONS

- Thermostat housings
- Water pumps

### 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. Remove cap and puncture tube seal.
4. Apply a continuous and even bead of silicone (approximately 1/8” in diameter) to one surface, first tracing the internal areas of the gasket configuration, then all surrounding bolt holes as shown below:



5. Assemble parts immediately while silicone is still wet.

6. Secure or tighten to recommended torque specifications.  
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. Replace the cap on the tube.
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	Oxime silicone rubber
Appearance	Grey non-sag paste
Odor	Low odor
Specific Gravity	1.5
Extrusion rate @ 25°C, (grams/min)	>250
Flash Point °C (°F)	>93 (>200)

### TYPICAL CURING PERFORMANCE

Permatex® Water Pump & Thermostat 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.

### PERFORMANCE OF CURED MATERIAL

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

	Typical Values
Hardness (Shore A)	>45
Elongation, %*	>120
Tensile Strength, N/mm <sup>2</sup> (psi)**	>2.6 (377)

\*Material will stretch 1.2 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 232	(-65 to 450)
Intermittent, °C (°F)	-54 to 260	(-65 to 500)

**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
22071	.5 oz. tube, carded

**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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