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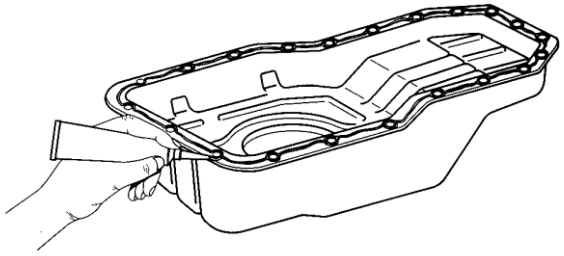
Technical Data Sheet

Permatex® Ultra Synthetic® Gasket Maker

AAM Revised 03/15

PRODUCT DESCRIPTION

Permatex® Ultra Synthetic® Gasket Maker is designed to provide resistance to synthetic oils. It is a single component, room temperature, vulcanizing, gasketing compound designed to provide reliable "formed-in-place" gaskets for mechanical assemblies. Permatex® Ultra Synthetic® Gasket Maker cures on exposure to moisture in the air to form a tough, flexible, silicone rubber gasket which resists aging, weathering, and thermal cycling without hardening, shrinking or cracking.



PRODUCT BENEFITS

- Resistance to synthetic oils
- Sensor safe, non-corrosive
- Good adhesion and flexibility
- Replaces most cut gaskets
- Can be used as a gasket maker or dressing
- Non-flammable, Non-toxic
- Low odor

TYPICAL APPLICATIONS

- Oil pans
- Valve covers
- Oil Pumps
- Timing gear covers
- Intake manifold end seals

DIRECTIONS FOR USE

For assembly as a form-in-place gasket

1. Remove all previous material from mating surfaces. Permatex® RTV Silicone Dissolver is recommended for removing cured silicones on most materials. It is not recommended for use on 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 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:
6. Assemble parts immediately while silicone is still wet.
7. Finger tighten flange only until material begins to seep out the sides of the flange.
8. Let dry for one hour and then secure or tighten to recommended torque specs. For best results, allow to cure overnight. Re-torque will not be necessary after the product has cured.
9. Allow 24 hours for product to fully cure before filling with fluids or returning to service.

For assembly as a gasket dressing

1. Repeat steps 1 through 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 film to pre-cut gasket surface.
5. Remove any excess and assemble parts immediately. ***Note: Product is not recommended for use as a cylinder head gasket or head gasket sealant.***

Storage of Unused Product

1. Create a "Silicone Plug" by allowing excess material to extend beyond the extension nozzle sealing and protecting the remaining product from moisture. For reuse, simply remove the cured product from the tip.

For Cleanup

1. Remove uncured product from parts and hand-tools with Permatex® Fast Orange® Wipes or Fast Orange® Hand Cleaners. If skinned over, break film with a dry cloth to remove as much as possible. Remove the remaining material with Permatex® RTV Silicone Dissolver.
2. Clean hands with a dry cloth or Permatex® Fast Orange® Hand Cleaner.

PROPERTIES OF UNCURED MATERIAL

	Typical Value
Chemical Type	Oxime silicone
Appearance	Dark Black
Odor	Low Odor
Specific Gravity, g/ml	1.42
Viscosity	Thixotropic paste
Extrusion rate @ 25C, (grams/min)	500
Flash Point °C (°F)	>93 (>200)

TYPICAL CURING PERFORMANCE

Permatex® Ultra Synthetic® Gasket Maker cures on exposure to moisture in the air. The product dries tack free in two hours and fully cures in 24 hours. Cure times will vary with temperature, humidity, and bond gap.

PERFORMANCE OF CURED MATERIAL

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

	Typical Values	
Hardness (Shore A)	50	
Elongation, %*	350	
Tensile Strength, N/mm^2 (psi)**	1.7	(240)
Gap Fill, inch	0.25	

*Material will stretch 3.6 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 204	(-65 to 400)
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 that come 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

82135	3.5 oz. tube

STORAGE

Products shall be ideally stored in a cool, dry location in unopened containers at a temperature between 8° and 28°C (46° and 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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