

Unit 3 Shipton Way Express Business Park Northampton Road Rushden, NN10 6GL Tel: 0870 458 9686

# **Technical Data Sheet** Permatex® Ultra Black

## **PRODUCT DESCRIPTION**

Permatex Ultra Black Gasket Maker 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 provide increased oil resistance and complies with extended warranty requirements. OEM Specified.

## **PRODUCT BENEFITS**

- Improved oil resistance
- 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 odour

## **TYPICAL APPLICATIONS**

- Oil pans
- Transmission pans
- Valve covers
- Valves and guides
- Timing gear covers
- Differential covers

## **DIRECTIONS FOR USE**

#### For assembly as a form-in-place gasket

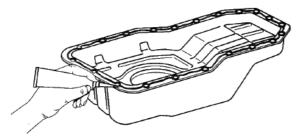
1. Remove all previous material from mating surfaces. 2. For best results, clean and dry all surfaces with a residue-free solvent, such as Brake and

Parts Cleaner

3. Cut nozzle to desired bead size, 2mm to 6mm in diameter. An 4mm 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. 7. Finger tighten flange only until material begins to
- seep out the sides of the flange.

8. Allow to set for at least two hours and re-torque at least one quarter to one half turn.

9. For best results, allow to cure overnight.

## 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

Create a "Silicone Plug" by allowing excess material to extend beyond the extension nozzle to cure, 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 Gasket Remover. 2. Clean hands with a dry cloth or Permatex Fast Orange Hand Cleaner.

## **PROPERTIES OF UNCURED MATERIAL**

#### **Typical Value**

Chemical Type Oxime silicone Metallic Black Appearance Odour No acetic odour Specific Gravity 1.43 Thixotropic paste Viscosity Flash Point °C >93

## TYPICAL CURING PERFORMANCE

Permatex Ultra Black 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 gap.

## PERFORMANCE OF CURED MATERIAL

After 7 days at 25 C, 50% Relative Humidity

## **Typical Values**

30	
360	
1.7	
6mm	
*Material will stretch 3.6 times its original length before	

breaking.

\*\*Amount of force required to break material.

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#### TYPICAL ENVIRONMENTAL RESISTANCE

**Temperature Resistance Typical Values** -54 to 204

Continuous, °C Intermittent, °C -54 to 260

## 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
	80ml Hang Sell Tube
821802 821803 821801	English, French, German Dutch Spanish, Portuguese, Italian Swedish, Finnish, Norwegian, Danish

## STORAGE

Products shall be ideally stored in a cool, dry location in unopened containers at a temperature between 8° to 28°C unless otherwise labelled. 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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