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Technical Data Sheet

Permatex® Black Silicone Adhesive Sealant

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PRODUCT DESCRIPTION

Permatex[®] Black Silicone Adhesive Sealant (low odor formula) is a general purpose, single component, room temperature vulcanizing (RTV) 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. Note: Not recommended for engine gasketing applications.

PRODUCT BENEFITS

- Low odor formula
- Easy application
- Applied to horizontal or vertical surfaces
- Superior adhesion and flexibility
- Waterproofs
- Insulates
- Unaffected by vibration
- Non-flammable
- Non-toxic

TYPICAL APPLICATIONS

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

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

Bonds, seals, repairs, mends and secures:

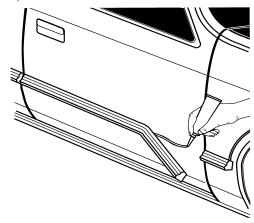
- Weather stripping
- Windshields
- Windows
- Door frames
- Vinyl tops
- Housings and covers

DIRECTIONS FOR USE

For Assembly

- 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.
- Remove cap, puncture tube or cartridge seal and attach extension nozzle.
- Apply a continuous and even bead of silicone to one surface, as shown below:



- Assemble parts immediately while silicone is still wet. Secure or tighten as required, avoiding excessive squeeze-out.
- Re-torque will not be necessary after the product has cured.

For Storage and Cleanup

- Allow 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.
- 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 (not on painted surfaces) 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	Black non-sag paste
Odor	Mild
Specific Gravity	1.42
Extrusion rate @ 25°C, (grams/min)	>250
Flash Point TCC °C (°F)	>93 (>200)

TYPICAL CURING PERFORMANCE

Permatex[®] Black Silicone Adhesive Sealant cures on exposure to moisture in the air. The product dries tack free in 1 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) >18 Elongation, %* >350

Tensile Strength, N/mm² (psi)** >1.2 (>170`)

TYPICAL ENVIRONMENTAL RESISTANCE Temperature Resistance Typical Values

Continuous, °C (°F)	-59 to 232	(-75 to 450)
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
81158 (16BR)	3 oz. tube, carded
81173 (16C)	11 oz. cartridge

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

^{**}Amount of force required to break material.