



## Technical Data Sheet

### Permatex® The Right Stuff®

#### PRODUCT DESCRIPTION

PERMATEX® The Right Stuff® is a single component, room temperature curing, elastomeric gasketing compound designed to provide reliable “formed-in-place” gaskets for mechanical assemblies. The Right Stuff® is a non-slumping, non-corrosive, low odor, low volatile, single component, proprietary, hi-tech, elastomeric rubber gasketing material. It has been designed specifically as a replacement for conventional cut gaskets where instant sealability is advantageous. The product resists aging, weathering and thermal cycling without hardening, shrinking or cracking. Designed for superior bonding properties to oil contaminated metals as compared to other formed-in-place gaskets, and maintains outstanding oil resistance. NSF White Book registered.

#### PRODUCT BENEFITS

- Immediate sealability
- Instant blow-out resistance
- OEM Approved and Specified
- Replaces most cut gaskets
- Low odor
- Resistant to ATF/oil/coolant
- Consistent sealing
- Sensor safe

#### TYPICAL APPLICATIONS

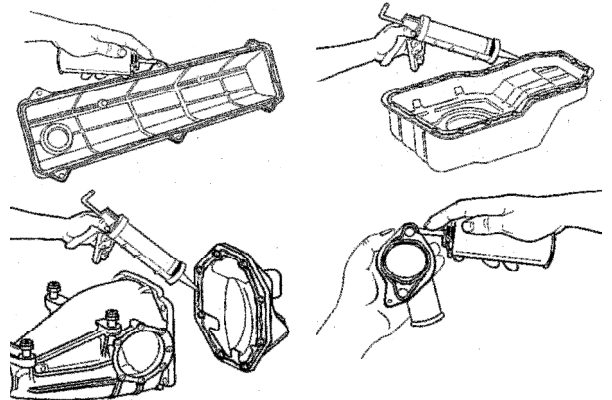
- Timing gear covers
- Transmission pans
- Valve covers
- Oil pans
- Water pumps
- Gearboxes
- Intake manifold end seals
- Stamped sheet metal covers
- Compressors
- Gearboxes

#### DIRECTIONS FOR USE

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

1. Remove all previous material from mating surfaces. Permatex® Silicone Stripper is recommended for most materials.
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 The Right Stuff® to one surface, first tracing the internal areas of the gasket configuration, then all surrounding bolt holes as shown below:



6. Assemble parts within 5 minutes while The Right Stuff® is still wet. Secure or tighten to recommended torque specs.
7. Re-torque will not be necessary after the product has cured.

Note: Not for use as a head gasket or on parts in contact with gasoline

##### Directions for PowerBead™

1. Clean and dry all flange surfaces to be sealed.
2. Remove black cap from top of extension nozzle.
3. Turn nozzle extension one complete turn (360°) counterclockwise.
4. Depress finger trigger and apply a continuous 1/16 inch to 1/8 inch PowerBead™ to one surface.
5. Assemble parts within 5 minutes while The Right Stuff® is still wet. Secure or tighten to recommended torque specs.
6. Parts or vehicle may be placed back into service immediately.
7. Re-torque will not be necessary after the product has cured.
8. To close, turn extension nozzle clockwise until tight (about one full turn). Wipe off excess material from nozzle and replace black cap.

##### Storage of Unused Product

1. Create a “silicone plug” by allowing 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. For PowerBead™ dispensers, you may store remaining product using either the above “silicone plug”

method or using the included plastic cap.

**PROPERTIES OF UNCURED MATERIAL**

	<b>Typical Value</b>
Chemical Type	Elastomeric Rubber
Appearance	Metallic Black
Specific Gravity @ 20°C	1.31
Viscosity	Thixotropic Paste
Flash Point (TCC), °F	>200

**TYPICAL CURING PERFORMANCE**

**Cure Time**

The surface of this adhesive becomes dry to touch on exposure to atmospheric moisture within 15 minutes at 23± 2°C, 50 ± 5% RH. The product cures on exposure to moisture in the air and dries tack free in two hours, with full cure in 24 hours. Cure times will vary with temperature, humidity and gap.

**Instant Seal**

Parts assembled with PERMATEX® The Right Stuff® are instantly sealed and can be immediately placed into service.

**TYPICAL PROPERTIES OF CURED MATERIAL**

	<b>Typical Value</b>
Hardness, Shore A, ASTM D2240	30 ± 5
Elongation at break, %, ASTM D412	550
Tensile strength, N/mm <sup>2</sup> , ASTM D412	1.4 min

**PERFORMANCE OF CURED MATERIAL**

(After 21 days @ 23±2°C, 50±5% RH at 0.5mm gap)  
Isopropyl Alcohol wiped substrates

	<b>Typical</b>	
	<b>Value</b>	<b>Range</b>
Shear Strength, ASTM D1002, DIN 53283		
Mild steel, N/mm <sup>2</sup>	1.2	1.0 to 1.4
Aluminum (T2024), N/mm <sup>2</sup>	(150)	(150 to 200)
Aluminum (Alclad), N/mm <sup>2</sup>	1.0	0.7 to 1.3
Zinc Dichromate, N/mm <sup>2</sup>	(150)	(100 to 190)
Aluminum (psi)	1.3	1.0 to 1.5
Zinc Dichromate, N/mm <sup>2</sup>	(180)	(150 to 220)
Aluminum (psi)	1.3	1.0 to 1.5
Zinc Dichromate, N/mm <sup>2</sup>	(180)	(150 to 220)

**TYPICAL ENVIRONMENTAL RESISTANCE**

**Temperature Resistance**

	<b>Typical Values</b>	
Continuous, °C (°F)	-59 to 232	(-75 to 450)
Intermittent, °C (°F)	-59 to 260	(-75 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**

<b>Part Number</b>	<b>Container Size</b>
25223	4 oz. auto. tube
25224	7 oz. auto. tube
25229	3 oz. auto. tube, carded
33694	10.1 fl. oz. cartridge
29208	5 oz. cartridge
85224	7.5 oz. PowerBead
99070	5 oz. cartridge, 2 pack with caulking gun
800368	Short caulking gun

**STORAGE**

Product shall be ideally stored in a cool, dry location in unopened containers at a temperature between 8°C to 28°C (46°F to 82°F) unless otherwise labeled. Optimal storage is at the lower half of this temperature range.

**DATA RANGES**

The data contained herein may be reported as a typical value and/or range. Values are based on actual test data and are verified on a periodic basis.