

Technical Data Sheet

Permatex® The Right Stuff®

INDUSTRIAL

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
- · Replaces most cut gaskets
- Low odor
- Resistant to ATF/oil/coolant
- Consistent sealing
- Sensor safe

TYPICAL APPLICATIONS

- Gearboxes
- Stamped sheet metal covers
- Compressors
- Gearboxes

DIRECTIONS FOR USE

For assembly as form-in-place gasket

- Remove all previous material from mating surfaces. Permatex[®] Silicone Stripper is recommended for most materials.
- For best results, clean and dry all surfaces with a residue-free solvent, such as Permatex[®] Brake and Parts Cleaner.
- Cut nozzle to desired bead size, 1/16" to 1/4" in diameter. A 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 The Right Stuff®
 to one surface, first tracing the internal areas of the
 gasket configuration, then all surrounding bolt holes as
 shown below:
- 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.

S.I.N.: 834-300

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.
- Turn nozzle extension one complete turn (360°) counterclockwise.
- Depress finger trigger and apply a continuous 1/16-inch to 1/8 inch PowerBead™ to one surface.
- 5. Assemble parts immediately while silicone is still wet.
- Finger tighten flange only until material begins to seep out the sides of the flange.
- 7. Allow to set for at least two hours and re-torque at lease one guarter to one half turn.
- 8. For best results, allow to cure overnight.
- 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

- 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.
- For PowerBead™ dispensers, you may store remaining product using either the above "silicone plug" method or using the included plastic cap.

TYPICAL CURING PERFORMANCE Cure Time

The surface of this adhesive becomes dry to touch on exposure to atmospheric moisture within 5 minutes at $23\pm 2\%$, $50\pm 5\%$ 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

 $\begin{tabular}{lll} \textbf{Typical Value} \\ \begin{tabular}{lll} \textbf{Hardness}, Shore A, ASTM D2240 & 30 \pm 5 \\ \begin{tabular}{lll} \textbf{Elongation at break}, \%, ASTM D412 & 550 \\ \begin{tabular}{lll} \textbf{Tensile strength}, N/mm^2, ASTM D412 & 1.4 min \\ \end{tabular}$

PROPERTIES OF UNCURED MATERIAL

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

PERFORMANCE OF CURED MATERIAL

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

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

Tymical

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)

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
25224	7 oz. automatic Tube®
33694	10.1 fl. oz. cartridge
29208	5 oz. cartridge
29247	short caulking gun
85224	7.5 oz. PowerBead

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.

Distributed by:

All-Spec Industries 800-537-0351 (phone) Wilmington, NC 800-379-9903 (fax) sales@all-spec.com

NOTE

The data contained herein are furnished for information only and are believed to be reliable. We cannot assume responsibility for the results obtained by others over whose methods we have no control. Permatex, Inc. specifically disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale or use of Permatex, Inc. products and disclaims any liability for consequential or incidental damages of any kind, including lost profits. This product may be covered by one or more United States or foreign patents or patent applications.