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Technical Data Sheet

Permatex® High Temperature Anaerobic Flange Sealant

AAM 04/19

PRODUCT DESCRIPTION

Permatex® High Temperature Anaerobic Flange Sealant is a high temperature sealant specifically engineered for making in rigid assemblies. It is able to withstand temperatures up to 400°F (204°C) and fills gaps up to 0.020" (primed) and permits clamping loads to be maintained for strong, leak-proof assemblies.

PRODUCT BENEFITS

- Seals all surface imperfections
- Seals most common automotive fluids
- No cracking or shrinking during cure
- Eliminates costly retorquing operations
- Single component system
- Non-corrosive to metal parts

TYPICAL APPLICATIONS

Seals close fitting joints between rigid metal faces and flanges. Particularly suited where maximum temperature and chemical resistance is required.

DIRECTIONS FOR USE

1. Surfaces to be sealed should be free of grease, oil and dirt. Use Permatex® Brake and Parts Cleaner to remove oil. Use Permatex® Gasket Remover to remove old gaskets.
2. Apply manually to one side of flange, making sure a continuous bead is applied.
3. Reassemble parts. Flanges should be tightened as soon as possible after assembly to avoid shimming.
4. Torque to normal specifications.
5. Parts may be returned to service in one hour.

For Cleanup

1. Wipe off excess material with a clean cloth.
2. Clean hands with Permatex® Fast Orange® hand cleaner or soap and water.

For Disassembly

1. For smaller assembled parts, heat part to 400°F to 450°F.
2. Use cautious, light prying or tapping motion to loosen the parts. Repeat heating/prying sequence as needed.
3. For larger assembled parts use prying/cleaving tools in combination with a light hammer and cautiously tap and pry the sides of the part to break the gasketed surfaces loose.
4. Once parts are disassembled, allow all surfaces to cool to room temperature.
5. Use Permatex® Gasket Remover to remove dried anaerobic material.

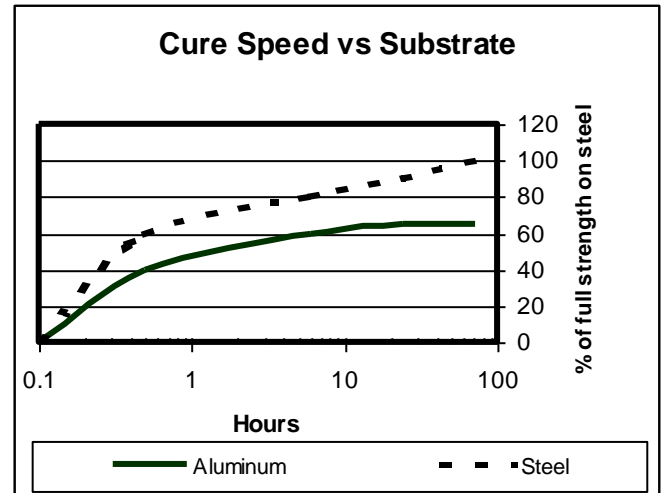
PHYSICAL PROPERTIES

	Typical Value
Chemical Type	Dimethacrylate Ester
Appearance	Gel
Color	Red
Odor	Acrid
Specific Gravity	1.08
Viscosity cP	
Brookfield HBT	
TC @ 2.5 rpm	288,000
@ 20 rpm	50,000
Gap cure (inch)	0.010 diametral (Unprimed)
	0.020 diametral (Primed)
Cure Speed (Hours)	1 - 12 (Unprimed)
	15 Minutes - 2 (Primed)
Flash Point (°F)	>200

TYPICAL CURING PERFORMANCE

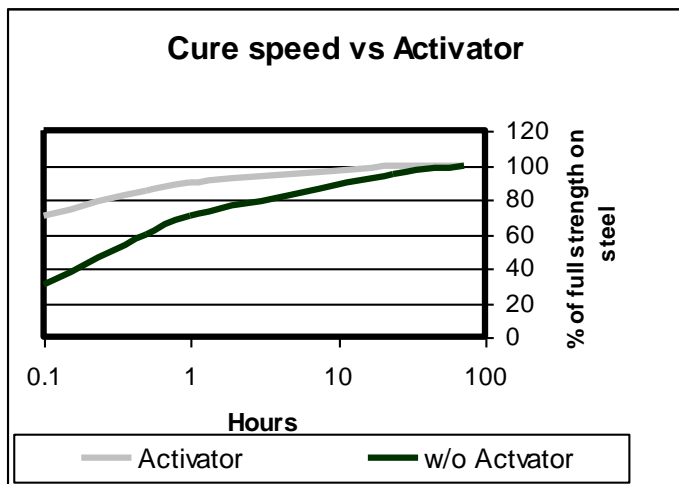
Cure Speed vs. Substrate

The rate of cure will depend on the substrate used. The graph below shows the shear strength developed with time on grit blasted steel lap shears compared to different materials and tested according to ASTM D 1002.



Cure Speed vs. Activator

Where cure speed is unacceptably long, or large gaps are present, applying activator to the surface will improve cure speed. The graph below shows the shear strength developed with time using Surface Prep Activator on grit blasted steel lap shears and tested according to ASTM D 1002.



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.

Chemical / Solvent Resistance

Aged under conditions and tested at 22°C(72°F). Substrate: Grit blasted steel lap sheers.

% Initial Strength retained after time	Temp	500hr	1000hr
Heat aged	150°C		155%
Motor oil	125°C		150%
Antifreeze	87°C	60%	
Gasoline	23°C	95%	
Trans Fluid	23°C	95%	

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
51031	50 ml. tube

STORAGE

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