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Product Description Sheet

Product Vibra-Seal® 503

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PRODUCT DESCRIPTION

LOCTITE® Product Vibra-Seal 503 is a low viscosity, non-toxic, thixotropic, preapplied, water-based thread sealant for bulk processing applications (tumble or flow coat). When dried, it becomes a resilient, tight clinging, non-curing sealant for tapered or straight threads. The product provides excellent solvent resistance and an operating temperature range from -54°C to 150°C (-65°F to 300°F).

TYPICAL APPLICATIONS

LOCTITE® Product Vibra-Seal 503 provides positive sealing and resistance to vibrational loosening. The products thread filling ability and prevailing torque characteristics are effective for use on sealing applications, particularly where re-adjustments are required.

- Rear axle filler plugs
- Bearing adjuster nuts
- Overhead fire sprinklers
- Pressure gauges & sensors
- Screws for plastic assemblies
- Compressor pipe plugs
- Adjustment Screws
- Shower heads
- Brake fittings
- Cable connectors
- Pipe fittings
- Door closure hardware

PROPERTIES OF UNCURED MATERIAL

	Value	Typical Range
Chemical Type	Acrylic	
Appearance	White	
Specific Gravity @ 25°C	1.25	1.1 to 1.4
Viscosity @ 25°C, mPa.s (cPs)		
Brookfield RVT, Spindle #4, 20 rpm	5,500	4,000 to 7,000
Flash Point (TCC), °C	Aqueous	

PERFORMANCE OF CURED MATERIAL

Instant seal 1/2 inch NPT fittings to 120 psi (830 kPa)

Prevailing torque characteristics resists loosening. Values for 3/8" -16 nuts and bolts.

		Typical Value
Seating Torque	N.m	40.7
	(lb.in)	(369)
Breakloose Torque	N.m	19.8
	(lb.in)	(175)
Prevail Torque	N.m	2.4
	(lb.in)	(21)
On part life, years		4

Chemical / Solvent Resistance

Test performed on 1/2 inch NPT tee's and malleable plugs test at 120 psi (830 kPa) air after 30 days immersion in solvents indicated.

Solvent	Temp.	Results
10W30 Motor Oil	120°C (248°F)	No leakage
Water/Glycol (50%/50%)	100°C (212°F)	No leakage
Diesel Fuel	50°C (122°F)	No leakage
Dextron III	120°C (248°F)	No leakage
Hydraulic Steering Fluid	120°C (248°F)	No leakage

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).

Directions for use

LOCTITE® Product Vibra-Seal 503 can be applied directly to pipe threads with any one of several semi-automatic/ automatic application systems. Before applying the product, parts should be free of surface contamination such as oil, grease, dirt, etc. The product is applied to threaded parts by authorized Process Centers throughout the United States who have automatic fastener cleaning, feeding, coating, rust proofing and drying equipment. Quantities can be handled promptly with minimum turnaround time. Sample bolts or nuts should be sent to the nearest authorized converter where they will coat your parts and return to you for evaluation. Contact a Loctite Technical Service Center for an authorized Process Center nearest you.

Storage

Products shall be ideally stored in a cool, dry location in unopened containers at a temperature between 8° to 28°C (46° to 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. For specific shelf-life information, contact your local Technical Service Center.

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. It is the user's responsibility to determine suitability for the user's purpose of any production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof. In light of the foregoing, **Loctite Corporation specifically disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale or use of Loctite Corporation's products. Loctite Corporation specifically disclaims any liability for consequential or incidental damages of any kind, including lost profits.** The discussion herein of various processes or compositions is not to be interpreted as representation that they are free from domination of patents owned by others or as a license under any Loctite Corporation patents that may cover such processes or compositions. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide. This product may be covered by one or more United States or foreign patents or patent applications.

NOT FOR PRODUCT SPECIFICATIONS

THE TECHNICAL DATA CONTAINED HEREIN ARE INTENDED AS REFERENCE ONLY.

PLEASE CONTACT LOCTITE CORPORATION QUALITY DEPARTMENT FOR ASSISTANCE AND RECOMMENDATIONS ON SPECIFICATIONS FOR THIS PRODUCT.
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