

DELTA D509 SLEEVE & BUSH RETAINER

high strength Retaining Adhesive

DELTA D509 is a fast curing, HIGH strength permanent anaerobic retaining compound used in all general automotive retaining and sealing applications on shafts, bearings, key ways and cylindrical parts.

DELTA D509 is highly resistant to heat, vibrations, water, gases, oils, hydrocarbons and many chemicals.

Applications:

- Ideal for gap fill up to 0.01" (0.25 mm) diameters.
- Used for locking bushings and sleeves into housings and on shafts

- Maximum strength at room temperature.
- High strength permanent adhesion

Physical Properties:

Composition:	Urethane methacrylate
Color:	Blue
Viscosity@ 25°C: Brookfield RVT Spindle3 @ 20 rpm	2,200 - 2500 Thixotropic cps
Specific Gravity:	1.09
Maximum Diameter of Thread/Gap Filling:	0.25 mm
Flash Point:	93 °C
Solvent Content:	None
Shelf Life:	1 year



TECHNICAL DATA SHEET

Curing Properties:

Handling Cure Time:	10-15 minutes
Functional Cure Time:	1-3 hours
Full Cure Time:	24 hours
Compressive Shear Strength:	
24 hours	15 – 25 N.m
30 mins	15 – 17 N.m
Temperature Range	-50°C to 150°C

Material Physical Properties:

Coefficient of Thermal Expansion, K ⁻¹ ASTM D 696	80 x 10 ⁻⁶
Coefficient of Thermal Conductivity ASTM C 177, W/m.K	0.10
Specific Heat, kJ/(kg·K)	0.30

Chemical Resistance:

Chemical	Temp.	% Initial Strength Retained	
		500 hours	1000 hours
Acetone	22 °C	100	100
Ethanol	22 °C	100	100
Motor Oil	125 °C	100	100
Gasoline	22 °C	100	100
Brake Fluid	22 °C	100	100
Water/Glycol	87 °C	100	95



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Application Method:

Surfaces should be dry, clean, and free of any contamination using D406 Surface Preparation Cleaner. Apply the product liberally to the threaded surface of the fixing, ensuring complete coverage. To increase the cure speed, spray the uncoated surface with Activator D405 and allow to dry. Using standard practices, assemble and wrench tighten fittings until correct torque is obtained. Maximum strength and resistance properties will be achieved after approximately 24 hours.

General Information:

This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be selected as an adhesive for contact with chlorine or other strong oxidizing materials.

Storage:

Anaerobic adhesives shall be ideally stored in a cool, dry place in unopened containers at a room temperature between 5 °C to 25 °C. Please do not return any unused material to its original container.

Health and Safety:

This product and the auxiliary materials normally combined with it are capable of producing adverse health effects ranging from minor skin irritation to serious systemic effects. None of these materials should be used, stored, or transported until the handling precautions and recommendations as stated in the Material Safety Data Sheets (MSDS) for this and all other products being used are understood by all persons who will work with the material.

Warranty: All products purchased from or supplied by Delta are subject to terms and conditions set out in the contract. Delta warrants only that its product will meet those specifications designated as such herein or in other publications. All other information supplied by Delta is considered accurate but is furnished upon the express condition the customer shall make its own assessment to determine the product's suitability for a particular purpose. Delta makes no other warranty, either express or implied, including those regarding such other information, the data upon which the same is based, or the results to be obtained from the use thereof; that any product shall be merchantable or fit for any particular purpose; or that the use of such other information or product will not infringe any patent.