



# DELTA 44

## Screw Grade Adhesive

TECHNICAL DATA SHEET  
 EDITION: 19/08/08  
 PRODUCT CODE: D44

### PRODUCT DESCRIPTION

Delta 44 is a low strength, thixotropic anaerobic thread locking compound for bonding and sealing threads and retaining of cylindrical parts.

Delta 44 is highly resistant to heat, vibrations, water, gases, oils, hydrocarbons and many chemicals.

### APPLICATIONS

- Ideal for thread locking small screws from loosening under vibration.
- Ideal for fasteners diameters of 1/4" (6mm) and smaller.
- Specifically suitable for applications such as adjustment of screws and small diameter fasteners where easy disassembly is required.
- Meets Military specifications: MIL-S-46163 Type II Grade M

ADHESIVE PROPERTIES	
Composition	Methacrylate Ester
Colour	Purple
Viscosity <small>Brookfield RVT Spindle 3 @20 rpm</small>	1000 cps at 25°C
Specific Gravity	1.05
Maximum Diameter of Thread/Gap Filling:	1/4" (6mm)
Flash Point	>100°C
Shelf Life	2 years

CURING PROPERTIES	
Handling Cure Time	20 minutes
Functional Cure Time	1 - 3 hours
Full Cure Time	24 hours
Breakaway Torque, ISO 10964: M10 steel nuts and bolts N·m	6 N·m 53 lb.in.
Prevail Torque, ISO 10964: M10 steel nuts and bolts	4 N·m 30 lb.in.
Break loose Torque, ISO 10964: Pre-torqued to 5 N·m M10 steel nuts and bolts	9 to 21 N·m 80 to 190 lb.in.
Max. Prevail Torque, ISO 10964: Pre-torqued to 5 N·m M10 steel nuts and bolts N·m	9 to 21 N·m 80 to 190 lb.in.
Compressive Shear Strength, ISO 10123: Steel pins and collars	3 to 10 N/mm <sup>2</sup> 430 to 1,450 psi
Temperature Range	-55°C to 150°C



**ANAEROBIC ADHESIVES**  
**Thread Locking Series**

PHYSICAL PROPERTIES	
Coefficient of Thermal Expansion ASTM D 696, K-1	80 x 10 <sup>-6</sup>
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	80
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	90	85

**APPLICATION METHOD** Surfaces should be dry, clean and free of any contamination. Thread locker should be applied to the bolt or screw in sufficient quantity to fill threads. Delta 44 performs the best in thin bond gaps. This thread locker is specifically formulated to give controlled friction and torque/tension ratio during assembly.

**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 in its original container.

- HEALTH & SAFETY**
- Classification: Xi irritant
  - Keep out of reach of children
  - Refer to product Material Safety Data Sheet (MSDS).

**LEGAL NOTE** The data contained within this Technical Data Sheet is furnished for information only and is believed to be reliable at the time of issue. We cannot assume responsibility for results obtained by others over whose methods we have no control. It is the responsibility of the customer to determine the products suitability for use. Delta Adhesives Limited accepts no liability arising out of the use of this information or the products described herein.