

DELTA 33

Penetrating Grade Adhesive

TECHNICAL DATA SHEET

EDITION: 19/08/08

PRODUCT CODE: D33



PRODUCT DESCRIPTION

Delta 33 is a fast curing, penetrating, medium strength anaerobic thread locking compound for bonding and sealing threads, and retaining of cylindrical parts.

Delta 33 is highly resistant to heat, vibrations, water, gases, oils, hydrocarbons and many chemicals.

APPLICATIONS

- Penetrates threads by capillary action. Medium strength threadlocker.
- Ideal for sealing hairline cracks, small nuts and bolts
- Seals and welds porous metals parts. Localised heating and hand tools are needed for disassembly. Prevents corrosion and leakages.
- Secures setscrews and other assemblies after setting are complete.
- Fasteners on vibrating machines or moving components.
- Meets Military specifications: MIL-S46163A Type III Grade R and MIL-S-22473E Letter Grade AA

ADHESIVE PROPERTIES	
Composition	Methacrylate Ester
Colour	Green
Viscosity Brookfield RVT Spindle 3 @20 rpm	12 cps at 25°C
Specific Gravity	1.07
Maximum Diameter of Thread/Gap Filling:	M 5/ 1/2" / 0.07mm
Shelf Life	2 years

ANAEROBIC ADHESIVES
Thread Locking Series



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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	10 N·m 85 lb.in.
Prevail Torque, ISO 10964: M10 steel nuts and bolts	29 N·m 250 lb.in.
Break loose Torque, ISO 10964: Pre-torqued to 5 N·m M10 steel nuts and bolts	30 N·m 270 lb.in.
Max. Prevail Torque, ISO 10964: Pre-torqued to 5 N·m M10 steel nuts and bolts N·m	40 N·m 350 lb.in.
Compressive Shear Strength, ISO 10123: Steel pins and collars	5.4 N/mm ² 780 psi
Temperature Range	-55°C to 150°C

PHYSICAL PROPERTIES	
Coefficient of Thermal Expansion ASTM D 696, K-1	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	95	95
Ethanol	22°C	95	95
Motor Oil	125°C	85	50
Gasoline	22°C	90	90
Brake Fluid	22°C	90	85
Water/Glycol	87°C	90	90



APPLICATION METHOD Surfaces should be dry, clean and free of any contamination. Thread locker should be applied to the bolt in sufficient quantity to fill threads. Delta 33 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.