



# DELTA 66HV

## Stud Grade Adhesive

TECHNICAL DATA SHEET

EDITION: 19/08/18

PRODUCT CODE:

D66HV

### PRODUCT DESCRIPTION

Delta 66HV is a fast curing, high strength anaerobic thread locking compound for bonding and sealing threads and retaining of cylindrical parts.

Delta 66HV is highly resistant to heat, vibrations, water, gases, oils, hydrocarbons and many chemicals.

### APPLICATIONS

- Ideal for fasteners up to 1" (25mm) in diameter.
- Transmission and engine block studs, valve sets etc.
- High strength, permanent and eliminates need for double nutting and welding. Prevents corrosion and leakage.
- Fasteners on vibrating machines or moving components.
- Meets Military specifications: MIL-S-46163A Type I Grade K and MIL-S-22473E Letter Grade CVV.

ADHESIVE PROPERTIES	
Composition	Methacrylate Ester
Colour	Red
Viscosity Brookfield RVT Spindle 3 @20 rpm	500 - 900 cps at 25°C
Specific Gravity	1.11
Maximum Diameter of Thread/Gap Filling:	M 20/ 1" / 0.15mm
Flash Point	> 100°C
Solvent Content	None
Shelf Life	2 years

CURING PROPERTIES	
Handling Cure Time	10 minutes
Functional Cure Time	1 - 3 hours
Full Cure Time	24 hours
Breakaway Torque, ISO 10964: M10 steel nuts and bolts N·m	28 N·m 230 lb.in.
Prevail Torque, ISO 10964: M10 steel nuts and bolts	31 N·m 320 lb.in.
Break loose Torque, ISO 10964: Pre-torqued to 5 N·m M10 steel nuts and bolts	40 N·m 330 lb.in.
Max. Prevail Torque, ISO 10964: Pre-torqued to 5 N·m M10 steel nuts and bolts N·m	57 N·m 510 lb.in.
Compressive Shear Strength, ISO 10123: Steel pins and collars	>8 N/mm <sup>2</sup> >1,000 psi
Temperature Range	-55°C to 150°C

D66HV 1/2

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	95	90
Ethanol	22°C	100	100
Motor Oil	125°C	95	95
Gasoline	22°C	100	100
Brake Fluid	22°C	100	100
Water/Glycol	87°C	90	80

#### 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 66HV 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.