PALM LABS ADHESIVES
3063 Enterprise Road, DeBary FL, 32713
Phone (321) 710-4850 Fax (321) 710-4875
Email: Sales@PalmLabsAdhesives.com

TECHNICAL DATA SHEET

Anaerobic Thread Locking Compound

TURBO-LOCK 15 SERIES is a fast curing, large bolt, ***RED***, high strength, anaerobic thread-locking compound for bonding and sealing threads. Prevents rusting of threads. It is highly resistance to heat, vibrations, water, gases, oils, hydrocarbons and many chemicals. Disassembles with heat and hand tools.

Part Numbers for this TDS: 15-000, 15-001, 15-010, 15-050, 15-250, 15-1000

Application

- Ideal for locking and sealing of larger bolts and studs (25 mm and larger).
- Transmission and engine block studs, valve sets, etc.
- High strength, large bolt, permanent and eliminates need for double nutting and welding. Prevents corrosion and leakage.
- Excellent performance of even oily surfaces.
- Fasteners on vibrating machines or moving components.
- Meets Military Specification: MIL-S-43163

ADHESIVE PROPERTIES

Color	Red
Composition	Methacrylate Ester
Viscosity (Brookfield RVT Spindle 3 @ 20 rpm)	7000 cps at 25 °C
Specific Gravity	1.11
Maximum Bolt Size	1 ½" / 36 mm
Flash Point	> 100 °C
Solvent Content	None
Shelf Life	2 years

CURING PROPERTIES

Handling Cure Time	30 minutes
Functional Cure Time	2-4 hours
Full Cure Time	24 hours
Breakaway Torque ISO 10964	
M10 steel nuts and bolts N.m	32 N.m 280 lb.in.
Prevail Torque ISO 10964	
M10 steel nuts and bolts N.m	32 N.m 280 lb.in.
Breakloose Torque ISO 10964, pre-torqued to 5 N.m	
M10 steel nuts and bolts	38 N.m 340 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	9 N/mm^2 1300 psi
Temperature Range	-55 to 150 °C

PHYSICAL PROPERTIES

Coefficient of Thermal Expansion ASTM D 696, K-1	$80x10^{-6}$
Coefficient of Thermal Conductivity ASTM C 177, W/(m.K)	0.10
Specific Heat kJ/(kg.K)	0.30

CHEMICAL RESISTANCE

		% Initial Strength Retained	
Chemical	Temperature	500 Hours	1000 Hours
Acetone	22 °C	95	95
Ethanol	22 °C	95	95
Motor Oil	125 °C	100	100
Gasoline	22 °C	100	100
Brake Fluid	22 °C	90	90
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. This thread locker is specifically formulated to give controlled friction and torque/tension ratio during assembly.

Storage
Anaerobic adhesives are ideally stored in a cool, dry place in unopened containers at a room temperature between 46 °F to 82 °F. Please do not return unused material to its original container.

PRECAUTIONS: 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 Warranty: All products purchased from or supplied by Palm Labs Adhesives are subject to terms and conditions set out in the contract. Palm Labs Adhesives warrants only that its product will meet those specifications designated as such herein or in other publications. All other information supplied by Palm Labs Adhesives is consider accurate but are furnished upon the express condition the customer shall make its own assessment to determine the product's suitability for a particular purpose. Palm Labs Adhesives 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 nor infringe any patent.

Palm Labs Adhesives
Toll Free Phone 1-855-752-4583 Fax (321) 710-4875 Email: Sales@PalmLabsAdhesives.com 02/06/2017