

ONEBOND THREADLOCKER AND RETAINING 160

Description

The ONEBOND THREADLOCKER AND RETAINING 160 is a high strength anaerobic adhesive for locking and sealing of studs, nuts, bolts and threaded fasteners not requiring dismantling. Highly resistant to heat, corrosion, vibrations, water, gases, oils, hydrocarbons, and many chemicals. Suitable for slip and press fittings. Designed to improve the operating conditions, they are not labelled as hazardous products, according to actual directive on dangerous products.

Typical physical properties

Composition:	anaerobic methacrylate resin
Colour:	green
Viscosity (+25°C - mPa s):	450 - 650
Specific weight (+25°C - g/ml):	1,1
Max diameter of thread/ gap filling:	M20 - 0,15 mm
Shelf life +25°C:	1 year in original unopened packaging

Typical curing performance

Curing rate depends on the assembly clearance, material surfaces and temperature. Functional strength is usually reached in 1-3 hours and full curing takes 24-36 hours.

Curing properties (typical)

Bolt M10 x 20 Zn - quality 8.8 - nut h = 0,8 d at +25°C:

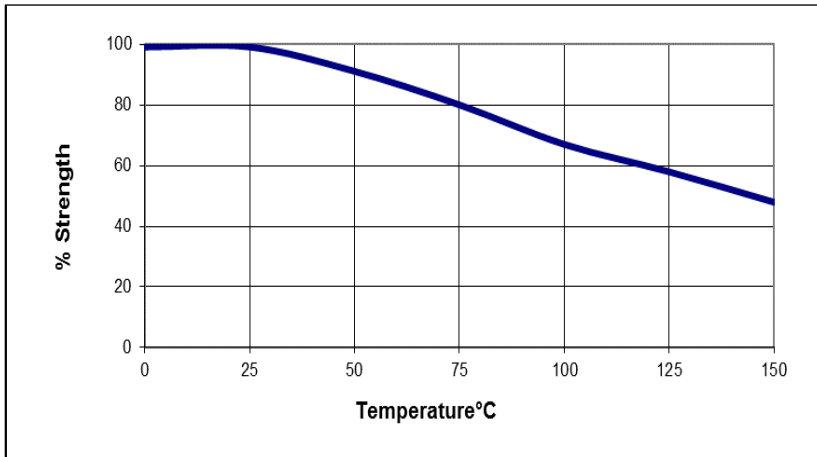
Handling cure time:	20 - 40 minutes
Functional cure time:	1 - 3 hours
Full cure time:	24 - 36 hours
Shear strength (ISO 10123):	10 - 20 N/mm ²
Breakaway locking torque (ISO 10964):	25 - 35 N m
Prevailing locking torque (ISO 10964):	50 - 60 N m
Temperature range:	-55°C/ +150°C

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Environmental resistance

Hot Strength

The graph below shows the mechanical strength vs. temperature.
Steel specimen - ISO 4587



Chemical resistance

Aged under conditions below after 24 hours from polymerization at indicated temperature.

Substance	°C	Resistance after 100 h	Resistance after 500 h	Resistance after 1000 h
Motor oil	125	Good	Discret	Discret
Gear box oil	125	Good	Discret	Discret
Gasoline	25	Excellent	Good	Good
Water/glycol 50%	87	Excellent	Excellent	Excellent
Brakes oil	25	Excellent	Excellent	Excellent

* For information on resistance with other chemicals, contact Onebond Technical Service

Directions for use

The product is recommended for use on metal surfaces.

Clean and degrease parts before bonding with acetone or isopropyl alcohol.

Apply product to fill completely the gap, assemble parts and hold on for curing time.

Liquid product can damage coating, some plastics and elastomers and late stress-cracking events might be induced if used with some thermoplastics.

For application on non-metal materials, contact Onebond Technical Service.

For disassembly, use normal tools and eventually heat pieces at +150/+250°C, remove any residue of cured product mechanically and clean parts with Acetone.

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Storage

Keep product in a cool and dry room at no more than +25°C. To avoid contaminations do not refill containers with used product. For further information on applications, storage and handling contact Onebond Technical Service.

Safety, handling and disposal

Consult Material Safety Data Sheet before use.

Note

The data contained herein, obtained in Onebond laboratories, are given for information only; if specifics are required, please contact Onebond Technical Department. Onebond ensures abiding quality of supplied products according to its own specifics. Onebond cannot assume responsibility for the results obtained by others which methods are not under Onebond control. It is user's responsibility to determine suitability for user's purpose of any product mentioned herein. Onebond disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale or use of Onebond products. Onebond specifically disclaims any liability for consequential or incidental damages of any kind, including lost profits.