Technical Data Sheet

LOCTITE® 262™

February 2022

PRODUCT DESCRIPTION

LOCTITE® 262™ provides the following product characteristics:

Technology	Acrylic
Chemical type	Dimethacrylate ester
Appearance (uncured)	Red liquid
Fluorescence	Positive under UV light
Components	One component – requires no mixing
Viscosity	Medium, thixotropic
Cure	Anaerobic
Secondary Cure	Activator
Application	Threadlocking
Strength	Medium to high

LOCTITE® 262™ is designed for the permanent locking and sealing of threaded fasteners. The product cures when confined in the absence of air between close fitting metal surfaces and prevents loosening and leakage from shock and vibration. Typical applications include the locking and sealing of large bolts and studs (up to M25). The thixotropic nature of LOCTITE® 262™ reduces the migration of liquid product after application to the substrate.

Mil-S-46163A

LOCTITE® 262™ is tested to the lot requirements of Military Specification Mil-S-46163A. **Note:** This is a regional approval. Please contact your local Technical Service Center for more information and clarification.

ASTM D5363

Each lot of adhesive produced in North America is tested to the general requirements defined in paragraphs 5.1.1 and 5.1.2 and to the Detail Requirements defined in section 5.2.

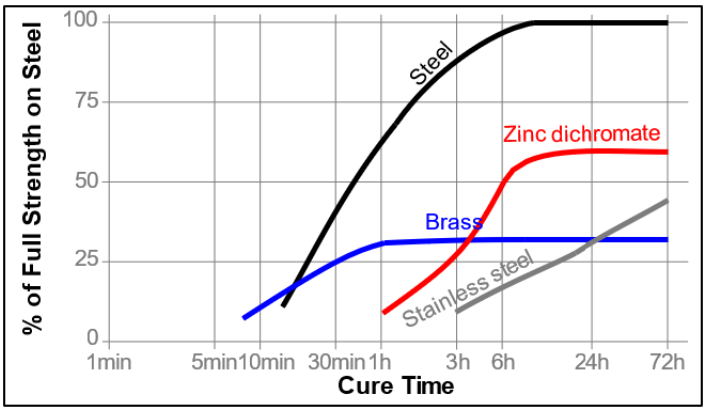
Typical properties of uncured material

Specific Gravity @ 25°C	1.1
Flash point - see SDS	
Viscosity, Brookfield - RVT, 25°C , mPa·s (cP): Spindle 3, speed 20 rpm	1200 to 1400
Viscosity, EN 12092 - MV, 25°C, after 180s, mPa·s (cP): Shear rate $129s^{-1}$	400

Typical curing performance

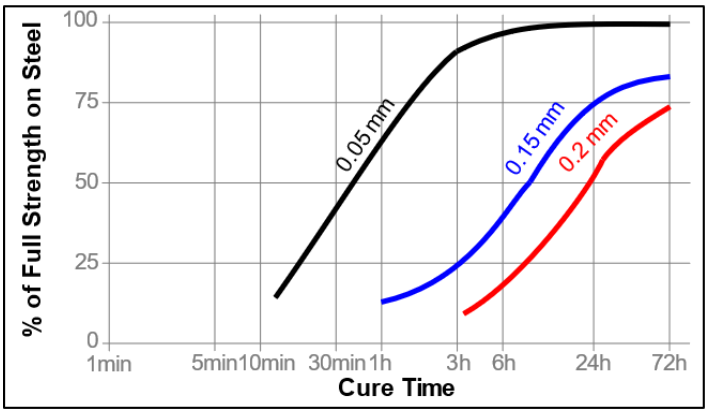
Cure Speed vs. Substrate

The rate of cure will depend on the substrate used. The graph below shows the breakaway strength developed with time on M10 steel nuts and bolts compared to different materials and tested according to ISO 10964.

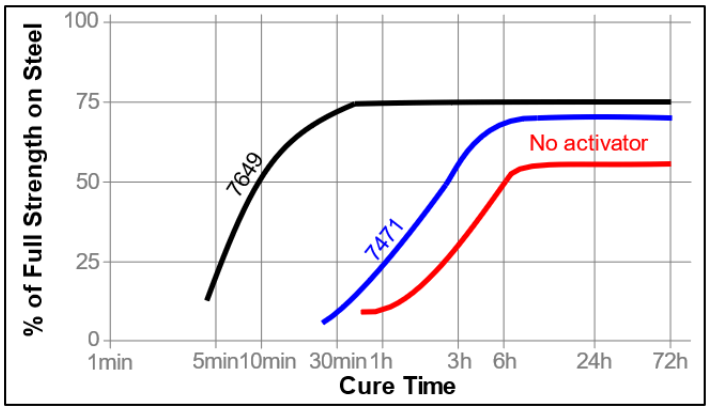


Cure speed vs. bond gap

The rate of cure will depend on the bondline gap. Gaps in threaded fasteners depends on thread type, quality and size. The following graph shows shear strength developed with time on steel pins and collars at different controlled gaps and tested according to ISO 10123.



Cure speed vs. activator
Where cure speed is unacceptably long, or large gaps are present, applying activator to the surface will improve cure speed. The graph below shows the breakaway strength developed with time on M10 zinc dichromate steel nuts and bolts using Activator SF 7471™ or SF 7649™ and tested according to ISO 10964.

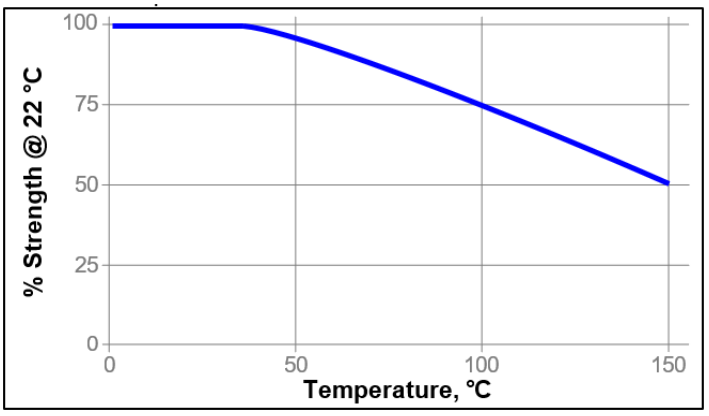


Typical performance of cured material
Adhesive properties

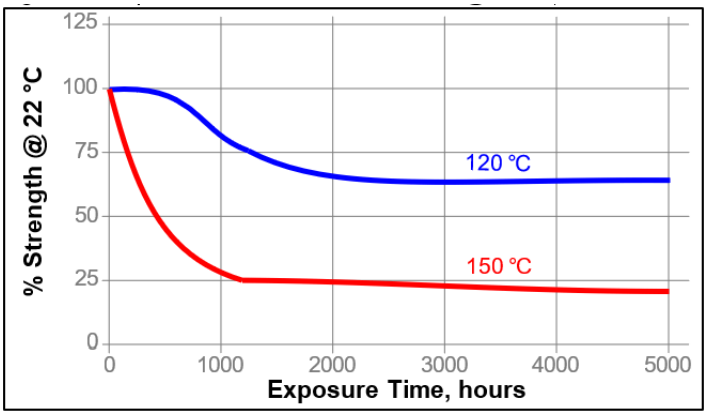
After 24 hours @ 22°C Breakaway torque, ISO 10964: M10 steel nuts and bolts	N·m (lb·in)	22 (190)
Prevail Torque, ISO 10964: M10 steel nuts and bolts	N·m (lb·in)	32 (280)
Breakloose torque, ISO 10964, pre-torqued to 5 N·m: M10 steel nuts and bolts	N·m (lb·in)	38 (340)
Max. Prevail Torque, ISO 10964, Pre-torqued to 5 N·m: M10 steel nuts and bolts	N·m (lb·in)	40 (350)
Compressive shear strength, ISO 10123: Steel pins and collars	N/mm^2 (psi)	≥10 (≥1,450)
After 1 hour @ 22°C Compressive shear strength, ISO 10123: Steel pins and collars	N/mm^2 (psi)	≥3 (≥435)

Typical environmental resistance
Cured for 1 week @ 22 °C
Breakloose torque, ISO 10964, pre-torqued to 5 N·m:
M10 zinc phosphate steel nuts and bolts:

Hot strength
Tested at temperature



Heat Aging
Aged at temperature indicated and tested @ 22 °C.



Chemical/solvent resistance
Aged under conditions indicated and tested @ 22 °C.

		% of initial strength			
Environment	°C	100 h	500 h	1000 h	5000 h
Motor oil (MIL-L-46152)	125	85	85	75	75
Leaded petrol	22	100	100	100	100
Brake fluid	22	100	100	100	100
Water/glycol 50/50	87	100	85	85	85
Acetone	22	95	95	95	95
Ethanol	22	95	95	95	95
DEF (AdBlue®)	22		128	140	125

GENERAL INFORMATION

This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be selected as a sealant for chlorine or other strong oxidizing materials.

For safe handling information on this product, consult the Material Safety Data Sheet.

Where aqueous washing systems are used to clean the surfaces before bonding, it is important to check for compatibility of the washing solution with the adhesive. In some cases these aqueous washes can affect the cure and performance of the adhesive.
This product is not normally recommended for use on plastics (particularly thermoplastic materials where stress cracking of the plastic could result). Users are recommended to confirm compatibility of the product with such substrates.

Directions for use

For Assembly

1. For best results, clean all surfaces (external and internal) with a LOCTITE® cleaning solvent and allow to dry.
2. If the material is an inactive metal or the cure speed is too slow, spray all threads with Activator SF 7471™ or SF 7649™ and allow to dry.
3. Shake the product thoroughly before use.
4. To prevent the product from clogging in the nozzle, do not allow the tip to touch metal surfaces during application.
5. **For Thru Holes**, apply several drops of the product onto the bolt at the nut engagement area.
6. **For Blind Holes**, apply several drops of the product to the lower third of the internal threads in the blind hole, or the bottom of the blind hole.
7. **For Sealing Applications**, apply a 360° bead of product to the leading threads of the male fitting, leaving the first thread free.
8. Force the material into the threads to thoroughly fill the voids.
9. For bigger threads and voids, adjust product amount accordingly and apply a 360° bead of product on the female threads also.
10. Assemble and tighten as required.

For disassembly

1. Apply localized heat to nut or bolt to approximately 250°C. Disassemble while hot.

For Cleanup

1. Cured product can be removed with a combination of soaking in a LOCTITE® solvent and mechanical abrasion such as a wire brush.

Storage

Store product in the unopened container in a dry location. Storage information may be indicated on the product package labeling.

Optimal Storage: 8°C to 21°C. Storage below 8°C or greater than 28°C can adversely affect product properties.

Material removed from containers may be contaminated during use. Do not return product to the original container. Henkel Corporation cannot assume responsibility for product which has been contaminated or stored under conditions other than those previously indicated. If additional information is required, please contact your local Henkel representative.

Product specification

The technical data contained herein are intended as reference only and are not considered specifications for the product. Product specifications are located on the Certificate of Analysis or please contact Henkel representative.

Approval and Certificate

Please contact Henkel representative for related approval or certificate of this product.

Data ranges

The data contained herein may be reported as a typical value. Values are based on actual test data and are verified on a periodic basis.
Temperature/Humidity Ranges: 23°C / 50% RH = 23±2°C / 50±5% RH

Conversions
(°C x 1.8) + 32 = °F
kV/mm x 25.4 = V/mil
mm / 25.4 = inches
µm / 25.4 = mil
N x 0.225 = lb
N/mm x 5.71 = lb/in
N/mm² x 145 = psi
MPa x 145 = psi
N·m x 8.851 = lb·in
N·m x 0.738 = lb·ft
N·mm x 0.142 = oz·in
mPa·s = cP

Disclaimer
The information provided in this Technical data sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. The product can have a variety of different applications as well as differing application and working conditions in your environment that are beyond our control. Henkel is, therefore, not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product. Any liability in respect of the information in the Technical data sheet or any other written or oral recommendation(s) regarding the concerned product is excluded, except if otherwise explicitly agreed and except in relation to death or personal injury caused by our negligence and any liability under any applicable mandatory product liability law.

In case products are delivered by Henkel Belgium NV, Henkel Electronic Materials NV, Henkel Nederland BV, Henkel Technologies France SAS and Henkel France SA please additionally note the following:
In case Henkel would be nevertheless held liable, on whatever legal ground, Henkel's liability will in no event exceed the amount of the concerned delivery.

In case products are delivered by Henkel Colombiana, S.A.S. the following disclaimer is applicable:
The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. Henkel is, therefore, not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product. Any liability in respect of the information in the Technical Data Sheet or any other written or oral recommendation(s) regarding the concerned product is excluded, except if otherwise explicitly agreed and except in relation to death or personal injury caused by our negligence and any liability under any applicable mandatory product liability law.

In case products are delivered by Henkel Corporation, or Henkel Canada Corporation, the following disclaimer is applicable:
The data contained herein are furnished for information only and are believed to be reliable. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof. In light of the foregoing, **Henkel Corporation specifically disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale or use of Henkel Corporation's products. Henkel Corporation specifically disclaims any liability for consequential or incidental damages of any kind, including lost profits.** The discussion herein of various processes or compositions is not to be interpreted as representation that they are free from domination of patents owned by others or as a license under any Henkel Corporation patents that may cover such processes or compositions. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide. This product may be covered by one or more United States or foreign patents or patent applications.

Trademark usage
Except as otherwise noted, all trademarks in this document are trademarks of Henkel Corporation in the U.S. and elsewhere. ® denotes a trademark registered in the U.S. Patent and Trademark Office.

Reference 2