

THREADLOCKER RED 271™

DESCRIPTION

LOCTITE® THREADLOCKER RED 271™ is designed for permanent locking and sealing of threaded metal fasteners. The product cures anaerobically, when there is an absence of air, between close fitting metal surfaces. It protects threads from rust and corrosion and prevents loosening from shock and vibration. Once cured, it is only removable by heating parts to 450°F (232°C).

Available As:

Item #	Package	Size
209741	Plastic carded squeeze tube	0.20 fluid ounce (6 mL)
2872405	Paper carded squeeze tube	0.20 fluid ounce (6 mL)

FEATURES & BENEFITS

- High strength and locks threads permanently
- Prevents loosening of metal fasteners caused by vibration
- Permanent seal prevents tampering and is only removable by heating
- Protects and seals threads from rust and corrosion

RECOMMENDED FOR

Use on metal fasteners up to 1" (25mm) in diameter in a wide variety of applications including:

Automotive – Internal engine, auto frame, auto suspension, wheel studs

Maintenance – Heavy machinery, structural fasteners, heavy conveyors, material movers

Home – Structural bolts, handrails, play sets, heavy duty equipment

LIMITATIONS

- Not for use on plastic parts, particularly thermoplastic materials where stress cracking of the plastic could result.
- Not 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.
- A primer is needed if two inactive metals are used i.e., plated parts, black oxide coated.
- Do not use in applications requiring "food safe" locking and sealing of fasteners.
- When used in devices handling gasoline, petroleum oils, and natural gas, pressure should not exceed over 300PSIG; devices holding butane and propane not to exceed 2 inch pipe size.

TECHNICAL DATA

Typical Uncured Physical Properties:

Color:	Red	Odor:	Mild
Appearance:	Liquid	VOC Content:	0.82% by weight CARB
Base:	Dimethacrylate ester		7.81 g/L SCAQMD
Viscosity:	400 – 600 cps	Flash Point:	>199.94°F (>93.3°C)
Specific Gravity:	1.10		

TECHNICAL DATA

Typical Application Properties:

Application Temperature: Apply above 50°F (10°C)	Lot Code 1BAA2230
Set Time: 10 minutes for active metals (steel) Longer for less active metals	Explanation: 1=Last digit of the year of manufacture
Cure Time: 24* hours	B = Month of Year (A=Jan, B=Feb., etc.)
Shelf Life: 24 months from date of manufacture (unopened)	Example: 1B = February 2021

*Time is dependent on temperature, humidity and thickness of adhesive applied

Typical Cured Performance Properties:

Color: Red	Cured Form: Non-flammable, hard solid
Service Temperature: -65°F (-54°C) to 300°F (149°C)	Moisture Resistant: Yes

Adhesive Properties:

After 90 minutes @ 72°F (22°C):

Breakaway Torque:
3/8 x 16 steel nuts (grade 2) and bolts (grade 5)

75 to 225 lb-in (8.5 to 25.4 N-m)

Prevail Torque:
3/8 x 16 steel nuts (grade 2) and bolts (grade 5)

150 to 300 lb-in (16.9 to 34 N-m)

After 24 hours @ 72°F (22°C):

Breakaway Torque (ISO 10964):
3/8 X 16 steel nuts (grade 2) and bolts (grade 5)
3/8 x 16 cadmium nuts and bolts
3/8 x 16 zinc nuts and bolts
M10 steel nuts and bolts

150 to 300 lb-in (16.9 to 34 N-m)
40 to 125 lb-in (4.5 to 14.1 N-m)
40 to 125 lb-in (4.5 to 14.1 N-m)
150 to 350 lb-in (17 to 40 N-m)

Prevail Torque (ISO 10964):
3/8 X 16 steel nuts (grade 2) and bolts (grade 5)
3/8 x 16 cadmium nuts and bolts
3/8 x 16 zinc nuts and bolts
M10 steel nuts and bolts

200 to 355 lb-in (22.6 to 40 N-m)
150 to 300 lb-in (16.9 to 34 N-m)
150 to 300 lb-in (16.9 to 34 N-m)
200 to 350 lb-in (23 to 40 N-m)

Applicable Specifications:

Tested to the requirements of

- Military Specification Mil-S-46163A
- ASTM D5363

Chemical/Solvent Resistance: Aged under conditions indicated and tested @ 72°F (22°C)

Environment	°F/°C	% of Initial Strength		
		100 hours	500 hours	1000 hours
Motor oil (MIL-L-46152)	257/125	85	85	75
Unleaded gasoline	72/22	100	100	100
Leaded Gasoline	72/22	100	100	100
Brake fluid	72/22	100	100	100
Ethanol	72/22	95	95	95
Acetone	72/22	95	95	95
1,1,1 Trichloroethane	72/22	100	95	95
Water/ glycol 50/50	189/87	100	85	85

DIRECTIONS

Tools Typically Required:

Wear gloves and wash hands after use. Utility knife and damp cloth.

Safety Precautions:

Keep out of reach of children!

Preparation:

Protect work area. Parts to be sealed must be clean and dry. Shake product thoroughly before use. Unscrew cap and cut tip.
Note: To prevent the product from clogging in the nozzle, avoid touching the tube tip to the metal surface.

Application:

For Thru Holes:

Apply several drops of the product onto the bolt at the nut engagement area.

For Blind Holes:

Apply several drops of the product down the internal threads to the bottom of the hole.

For Sealing Applications:

Apply a 360° bead of product to the leading threads of the male fitting, leaving the first thread free. Force the material into the threads to thoroughly fill the voids. For bigger threads and voids, adjust product amount accordingly and apply a 360° bead of product on the female threads also.

Assemble parts and tighten as required. Sets in approximately 10 minutes and fully cures in 24 hours.

For Disassembly:

Apply localized heat to nut or bolt to approximately 450°F (232°C). Disassemble while hot.

Clean-up:

Uncured: Wipe with a damp cloth.

Cured: Remove with a combination of soaking in a LOCTITE solvent (such as SF 790 Chisel Paint Stripper or Loctite 7601 Equipment Flushing Solvent) and mechanical abrasion such as a wire brush.

STORAGE & DISPOSAL

NOT DAMAGED BY FREEZING. Close the tube tightly after each use. Store product in the unopened container in a dry location. Optimal storage is between 46°F (8°C) to 70°F (21°C).

LABEL PRECAUTIONS

WARNING: Contains methacrylate ester. May cause allergic skin reaction and eye irritation. Avoid eye and skin contact. Avoid breathing vapors. Use only with adequate ventilation.

FIRST AID: For eye contact, flush with water for 15 minutes; call a physician. For skin contact, wash thoroughly with soap and water. If inhaled, move to fresh air. If swallowed, do not induce vomiting. Obtain medical attention.

KEEP OUT OF REACH OF CHILDREN



WARNING: Cancer and Reproductive harm – www.P65Warnings.ca.gov

Refer to the Safety Data Sheet (SDS) for further information.

DISCLAIMER

The information and recommendations contained herein are based on our research and are believed to be accurate, but no warranty, express or implied, is made or should be inferred. Henkel recommends purchasers/users should test the products to determine acceptable quality and suitability for the intended use. All adhesive/sealant applications should be tested under simulated or actual end use conditions to ensure the adhesive/sealant meets or exceeds all required project specifications. Since assembly conditions may be critical to adhesive/sealant performance, it is also recommended that testing be performed on specimens assembled under simulated or actual production conditions. Nothing contained herein shall be construed to imply the nonexistence of any relevant patents or to constitute a permission, inducement, or recommendation to practice any invention covered by any patent, without authority from the owner of the patent.

LIMITED WARRANTY

This product is warranted by Henkel Corporation to be free from defects in materials when used as directed. Henkel's sole obligation shall be, at its option, to replace or refund the purchase price of product proven to be defective. Henkel makes no other warranty – express or implied – including warranties of MERCHANTABILITY and FITNESS FOR A PARTICULAR PURPOSE and will not be liable for consequential or incidental damages. This Limited Warranty gives you specific legal rights, which vary from state to state. For warranty assistance, contact Henkel at 1.800.624.7767 M-F 9:00 am to 4:00 pm ET



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