



# THREAD LOCKERS

Traditional fastening methods have gaps.

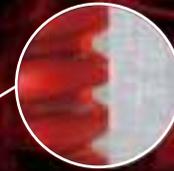
**Threadlockers fill them.**

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**PROBLEM**

Without Threadlockers:  
Vibrational loosening due to 85 % air gap.



**SOLUTION**

With Threadlockers:  
There's no vibrational loosening,  
and no gaps.

# Tighten your operation. Eliminate loosening.

Threadlockers lock and seal your threaded assemblies, protecting against vibration, corrosion and galling. But depending on your need, you have to choose the right Threadlocker and consider strength, form and removability. Which one will you need? LOCTITE makes your choice easy.



## How to choose a threadlocker.



### STRENGTH & DISASSEMBLY

From heavy equipment and permanent assemblies to mounting bolts and adjustment screws, LOCTITE has your Threadlocker.

#### LOW STRENGTH

Primarily used on adjustment screws, calibration screws, meters and gauges. They have high disassembly frequency and are removable with hand tools.

#### MEDIUM STRENGTH

Great for machine tools and presses, pumps and compressors, mounting bolts and gearboxes. They have normal disassembly frequency and are removable with hand tools.

#### HIGH STRENGTH

Used for more permanent assemblies, heavy equipment, suspension bolts, motor and pump mounts, cap bolts and studs. These are rarely disassembled and require localised heat for effective removal.



### FORM

Threadlockers come in a variety of different forms ranging from liquid, which flow smoothly into gaps and spaces, to semi-solid, a no-drip, no-mess formulation ideal for overhead applications. Knowing your application will help you select the correct Threadlocker.



### TEMPERATURE RESISTANCE

LOCTITE Threadlockers are formulated to have a good thermal performance for continuous service from application to removal.



BEST SELLER

# LOCTITE 243 Threadlocker

## General Purpose, Medium Strength

LOCTITE 243 works on all metals, including passive substrates such as stainless steel, zinc plated bolts and plated bolts. Proven to be tolerant of minor contamination due to e.g. motor oils, corrosion prevention oils, cutting fluids.

### Benefits:

- P1 NSF Reg. No.: 123000
- Fluorescent & thixotropic
- Indirect food approval
- Controlled on-torque



### Disassembly:

Removable with hand tools



### Form:

Liquid



### Temperature resistance:

180 °C



BEST SELLER

# LOCTITE 270 Threadlocker

## General Purpose, High Strength

LOCTITE 270 works on all metals, including passive substrates such as stainless steel, zinc plated bolts and plated bolts. Proven to be tolerant of minor contamination due to e.g. motor oils, corrosion prevention oils, cutting fluids.

### Benefits:

- P1 NSF Reg. No.: 123006



### Disassembly:

Not removable with standard hand tools, where hand tools do not work, apply localised heat.



### Form:

Liquid



### Temperature resistance:

180 °C



# Find the right product for your application



## DISASSEMBLY

### Medium Strength

LOCTITE 243  
LOCTITE 248  
LOCTITE 2400\*\*  
LOCTITE 290

### Low Strength

LOCTITE 222

### High Strength

LOCTITE 270  
LOCTITE 277  
LOCTITE 2700\*\*



\* Optimised Health & Safety products focusing on people safety. Enhancing safety in production, application and end-use.



\*\* Has been reformulated to offer improved cure on zinc-flake coatings, while maintaining a very reliable cure on active and passive metal surfaces. This upgrade has achieved this objective without compromising any key properties such as active substrate bond strength, inactive surface cure, chemical resistance or shelf life.

LOCTITE 2400 retains the WRAS, DVGW and German Hygiene Institute certifications and fully meets the LOCTITE Materials Specification of the former version.

LOCTITE 2700 retains the WRAS and German Hygiene Institute certifications and gains the DVGW approval. This upgraded product fully meets the LOCTITE Materials Specification of the former version.

## Medium Strength



**LOCTITE 243**  
General Purpose



**Strength & disassembly:**  
Removable with hand tools



**Form:** Liquid



**Temperature resistance:**  
180 °C

**Viscosity:** 2,150 mPa·s  
**Breakaway torque:** 26 Nm  
**Fixture speed:** 10 min.



**LOCTITE 248**  
No-Drip, No-Mess



**Strength & disassembly:**  
Removable with hand tools



**Form:** Stick



**Temperature resistance:**  
150 °C

**Viscosity:** Semi-solid  
**Breakaway torque:** 25 Nm  
**Fixture speed:** 5 min.



**LOCTITE 2400\*\***  
Health & Safety\*



**Strength & disassembly:**  
Removable with hand tools



**Form:** Liquid



**Temperature resistance:**  
150 °C

**Brookfield Viscosity:** 3,100 mPa·s  
**Breakaway torque:** 25 Nm  
**Fixture speed:** 10 min.



**LOCTITE 290**  
Wicking Grade



**Strength & disassembly:**  
Removable with hand tools



**Form:** Liquid



**Temperature resistance:**  
150 °C

**Viscosity:** 40 mPa·s  
**Breakaway torque:** 10 Nm  
**Fixture speed:** 20 min.

## Low Strength



**LOCTITE 222**  
General Purpose



**Strength & disassembly:**  
Removable with hand tools



**Form:** Liquid



**Temperature resistance:**  
150 °C

**Viscosity:** 1,200 mPa·s  
**Breakaway torque:** 6 Nm  
**Fixture speed:** 20 min.

# High Strength



## LOCTITE 270

General Purpose



**Strength & disassembly:**  
Removable with standard hand tools,  
where hand tools do not work apply  
localised heat



**Form:** Liquid



**Temperature resistance:**  
180 °C

**Viscosity:** 500 mPa·s  
**Breakaway torque:** 33 Nm  
**Fixture speed:** 10 min.



## LOCTITE 277

Large Bolts



**Strength & disassembly:**  
Removable with standard hand tools,  
where hand tools do not work apply  
localised heat



**Form:** Liquid



**Temperature resistance:**  
150 °C

**Viscosity:** 7,000 mPa·s  
**Breakaway torque:** 32 Nm  
**Fixture speed:** 45 min.



## LOCTITE 2700\*\*

Health & Safety\*



**Strength & disassembly:**  
Removable with standard hand tools,  
where hand tools do not work apply  
localised heat



**Form:** Liquid



**Temperature resistance:**  
150 °C

**Viscosity:** 450 mPa·s  
**Breakaway torque:** 37 Nm  
**Fixture speed:** 5 min.

## LOCTITE SERVICES

**STOP FASTENER FAILURE  
BEFORE IT HAPPENS.**

<https://www.henkel-adhesives.com/de/en/services.html>

## Surface Preparation



**LOCTITE SF 7063**  
Cleaner

A solvent-based, general purpose parts cleaner formulated for metals. The product is able to remove most oils, greases, lubrication fluids, metal fillings and dries residue-free.



**LOCTITE SF 7649**  
Activator

Designed to promote the curing speed of LOCTITE anaerobic adhesives and sealants. Especially recommended for applications with passive metals or inert surfaces and with large bond gaps.

## Equipment



**LOCTITE 97009**  
Semi Automatic Dispensing System HP  
(High Pressure)  
IDH 215845

Enables dispensing of the adhesive directly from the larger bottles. The controller provides digital timing control for any LOCTITE automatic dispense valve or automatic hand-held applicator. It is equipped with a precision pressure regulator: >0.1 – 4.0 bar for viscosities >1,500 mPa·s.



**NEW LOCTITE EQ PRO PUMP**  
Handheld Dispenser  
IDH 2564842

Our all-new easy to use, light-weight, durable applicator that allows for the precise application of 50 ml and 250 ml threadlockers, retaining compounds and thread sealants.



**LOCTITE EQ RC18**  
Semi Automatic Dispensing System LP  
(Low Pressure)  
IDH 2260508

Enables dispensing of the adhesive directly from the larger bottles. The controller provides digital timing control for any LOCTITE automatic dispense valve or automatic hand-held applicator. It is equipped with a precision pressure regulator: >0.1 – 0.7 bar for the RC18 (Low Pressure) for viscosities <1,500 mPa·s.



**LOCTITE 97130**  
Ergoloc Valve  
IDH 444643

It is a pneumatically operated handheld dispense valve, designed to be used in conjunction with pressure-time dispense systems.

Please refer to page 130 for additional equipment/information.

## NEW LOCTITE EQ PRO PUMP HANDHELD DISPENSER FOR EASY APPLICATION.

For a full lineup of equipment to support your needs visit <https://www.henkel-adhesives.com/de/en/products/equipment.html>



## THREADLOCKERS

Product	Pack Size	Colour	Features	Brookfield Viscosity (mPa*s)	Thixotropic (Yes/No)	Breakaway Torque / Prevail Torque (Nm)	Temperature Range (°C)	Fixture Time on Mild Steel (min.)
<b>LOW STRENGTH</b>								
<b>LOCTITE 222</b>	10 ml, 50 ml, 250 ml	Purple	Small screw, general purpose	1,200	Yes	6/4	-55 to +150	20
<b>MEDIUM STRENGTH</b>								
<b>LOCTITE 243</b>	5 ml, 10 ml, 24 ml, 50 ml, 250 ml	Blue	General purpose, inactive cure	2,150	Yes	26/5	-55 to +180	10
<b>LOCTITE 248</b>	9 g, 19 g	Blue	Easy application, semi-solid stick	Semi-solid	-	23/n.a.	-55 to +150	5
<b>LOCTITE 2400</b>	50 ml, 250 ml	Blue	General purpose	3,100	Yes	25/2	-55 to +150	10
<b>LOCTITE 290</b>	50 ml, 250 ml	Green	Post application, wicking capability	40	No	10/29	-55 to +150	20
<b>HIGH STRENGTH</b>								
<b>LOCTITE 270</b>	10 ml, 50 ml, 250 ml	Green	General purpose, inactive cure	500	No	33/33	-55 to +180	10
<b>LOCTITE 2700</b>	50 ml, 250 ml	Green	General purpose	450	No	37/45	-55 to +150	5
<b>LOCTITE 277</b>	50 ml, 250 ml	Red	Ideal for large bolts with coarse threads	7,000	Yes	32/32	-55 to +150	45

**SEE THE FULL LINE OF THREADLOCKERS AT:**

<https://www.henkel-adhesives.com/de/en/products/industrial-adhesives/threadlockers.html>



# Keeping a Wind Generator Operating Safely



“Thanks to our LOCTITE Engineering Solutions Expert, we don’t have to worry about corrosion or catastrophic fastener failure.”

A wind farm erecting its first wind generator wanted to ensure that the bolts attaching the blade to the hub maintained the designed torque and were protected from the corrosion that can occur with exposure to the elements. The ideal solution was **LOCTITE 243** Threadlocker, which helps prevent catastrophic failure by resisting vibrational loosening, preventing thread corrosion and maintaining fastener torque in the wing to hub assembly.

A LOCTITE Engineering Solutions Expert helped the team remove the protective shipping covers from the exposed bolt threads and clean the steel fasteners. They then inserted the blade into the main hub applied **LOCTITE 243** Threadlocker to the fasteners, torqued the blade to hub assembly to specification and mounted the hub to the generator drive system. Now, with corrosion free fasteners that maintain clamp load, and that are easily disassembled at a predictable break loose torque, the wind farm is assured of safe, maintenance-free wind turbine operation until scheduled downtime.

## **BENEFITS**

### **LOCTITE 243 Threadlocker:**

- Fills the gaps between threads to prevent movement between the nut and bolt
- Eliminates vibrational loosening, maintaining the original fastener torque and insuring safe operation
- Prevents corrosion that makes disassembly difficult