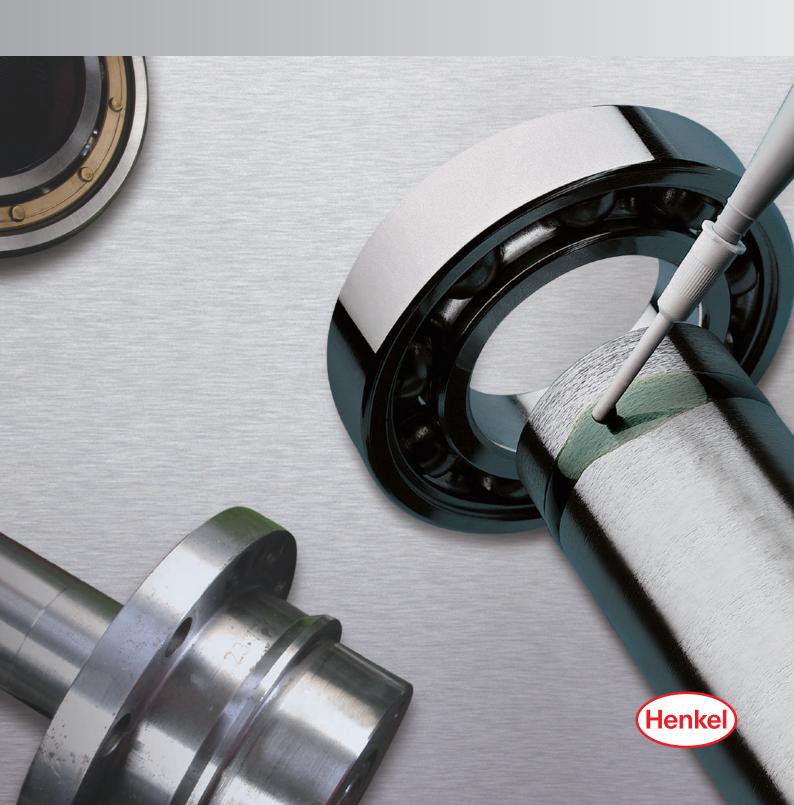




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General Manufacturing Anaerobics Selector Guide



Value-Added Partnership

Our large, experienced team of engineers provide documented design and application support.

Cost Savings and Reliability

LOCTITE® solutions are more cost effective compared to conventional mechanical methods.

Global Leadership

LOCTITE® is the global technology leader with wide product range sold through an extensive sales and distributor network.

Superior Product Performance

LOCTITE® adhesives and sealants are recognized as the best performing products in the industry.

End-User Training

We provide professional training programs to customers that help them identify opportunities for mproving process efficiency, quality and costs.

LOCTITE® is the world's #1 brand of engineering adhesives & sealants.



Achieving more with less

Our commitment to leadership in sustainability is deeply embedded in our values. With our revised Sustainability Strategy for 2030, we are building on our strong track record. At the same time, we are aiming to address one of the central future challenges: to decouple growth from resource consumption. At the heart of this strategy is therefore the simple, yet challenging, ambition: to achieve more with less. It aims to create more value for our customers, consumers, communities and the company alike, while simultaneously reducing the environmental footprint.





















THREADLOCKING

Prevent fastener loosening and seizure



Prevent leaks - air, hydraulic

GASKETING

Prevent flange leaks - oil, transmission, coolant

RETAINING

Prevent backlash – keyway wallow, spun bearings, shaft misalignment, wear, corrosion









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THREADLOCKING Locking of threaded fasteners

- » PREVENTS LOOSENING FROM SHOCK AND VIBRATION
- » SINGLE COMPONENT CLEAN AND EASY TO APPLY
- » CAN BE USED ON VARIOUS SIZES OF FASTENERS REDUCES INVENTORY COSTS
- » SEALS THREADS
- » STOPS RUST AND CORROSION





High - Red

ARE THE PARTS ALREADY ASSEMBLED?

- Clean parts with LOCTITE® ODC-Free Cleaner and Degreaser before applying the adhesive.
- If the threadlocker will be applied below 40°F (5°C), pre-treat with LOCTITE® 7649 Primer N.
- If the parts were in contact with aqueous washing solutions or cutting fluids that leave a protective layer on the surface, wash with hot water before use.

YES

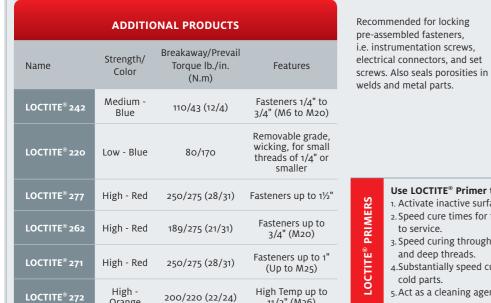
Wicking - Green

Low - Purple

Liquid Product

HENKEL SOLUTIONS LOCTITE® 290 Fastener Size #2 TO 1/2" (M2 TO M12) Strength High Cure Time (Fixture/Full Strength)* 20 min./24 hr. Breakaway/Prevail Torque Ib.in. (N.m) 90/260 (10/29) Temperature Resistance for Continuous Service 300°F (150°C) 10 ml bottle - 1595016 Package Size & IDH

11/2" (M36)



Orange



50 ml bottle - 232085

250 ml bottle - 235226

Liquid Product

LOCTITE® 222 Up to 1/4" (Up to M6) Low 10 min./24 hr. 53/30 (6/3) 300°F (150°C)

> 10 ml bottle - 1595017 50 ml bottle - 228581 250 ml bottle - 228582



Recommended for low strength threadlocking of adjustment screws, countersunk head screws, and set screws; on collars, pulleys, tool holders, and controllers. Also for low strength metals such as aluminum or brass

- 1. Activate inactive surfaces.
- 2. Speed cure times for faster return to service.
- 3. Speed curing through larger gaps and deep threads.
- 4.Substantially speed cure times on cold parts.



NO

What strength do you require?

Medium - Blue

Semi-Solid Product

LOCTITE® 243	LOCTITE® 248 (Up)
/4" to 3/4" (M6 to M20)	1/4" to 3/4" (M6 to M2
Medium	Medium
10 min./24 hr.	10 min./24 hr.
180/62 (20/7)	110/43 (12/4)
360°F (180°C)	300°F (150°C)

10 ml bottle - 1331537 50 ml bottle - 1311320 250 ml bottle - 1311322

Color

Amber

Viscosity

Liquid Product

With improved oil tolerance, LOCTITE® 243 Threadlocker is effective on all types of metal threaded fasteners. Prevents loosening on vibrating parts such as pump, motor mounting bolts, gear boxes, or presses. Removable with hand tools.

7649 Primer N Clear/Green

7471 Primer T



9 g stick - 37772

19 g stick - 37773

Semi-solid stick form is convenient, portable, and great for hard-to-reach applications. LOCTITE® 248 Threadlocker -Medium Strength is the ideal general-purpose threadlocker for all nut and bolt applications, especially fasteners between 1/4" and 3/4" (M6 to M20). Removable with hand tools. Oil tolerance & primerless.

Base

Acetone

Acetone/

Isopropanol

On-Part Life

30 days

7 days



Liquid Product

LOCTITE® 263

Up to 1" (Up to M25)

High

10 min./24 hr.

275/290

360°F (180°C)

10 ml bottle - 1331617

50 ml bottle - 1307415

250 ml bottle - 1307416

Versatile, high strength liquid threadlocker. Reliably locks and seals metal fasteners up to 1". Engineered to cure consistently on a variety of metals, despite minor surface contaminants. Works on steel, stainless steel and most plated fasteners. Tolerates thread lubrication, anticorrosion and protection fluids. Rated for 360°F (180°C). Heat required for removal.

Dry Time

30 to 70

30 to 70

seconds



Semi-Solid Product

LOCTITE® 268(Up)

Up to 3/4" (Up to M20)

High

20 min./24 hr.

202/4 (22/0.5)

300°F (150°C)

9 g stick - 1069297

19 g stick - 902328

This convenient semisolid stick form is portable and less messy. Its high strength prevents loosening of threaded fasteners. Well suited for heavy-duty applications. Oil tolerance & primerless.

Package Size & Primer is optional with: 1.75 OZ. - 1179077 100 ml - 555114 4.5 oz. - 475763 500 ml - 487644

1.75 OZ. - 1179078

100 ml - 555104

4.5 OZ. - 555110

500 ml - 555112

Active surfaces: Brass, copper, bronze, iron, soft steel, nickel.

Primer is required with:

Inactive surfaces: Aluminum, stainless steel, magnesium, zinc, black oxide, cadmium, titanium, and others.

Use LOCTITE® Primer to:

- 5.Act as a cleaning agent.

^{*} Typical value @ 70°F (22°C)

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THREAD SEALING

- » REPLACES TAPES AND PASTES
- » LIQUIDS ENSURE COMPLETE CONTACT BETWEEN THREADS FOR A 100% SEAL
- » LIQUIDS WILL NOT CREEP, SHRINK, SHRED OR BLOCK SYSTEMS (INCLUDING FILTERS)
- » DISASSEMBLY CAN BE ACHIEVED EASILY WITH BASIC HAND TOOLS





ARE THE PARTS METAL OR PLASTIC?

Helpful Hints:

• All parts must be clean and dry before sealing - use LOCTITE®

		•	
PI A	STIC	AND/OR	MFTAI

Fine

METAL PARTS

Are the threads fine or coarse?

Coarse

Do you prefer a solid or a liquid? (Solid is ideal for overhead or hard to reach applications)

Liquid

LOCTITE® 565	LOCTITE® 577	LOCTITE® 567	LOCTITE® 561
White to off White Paste	Yellow Paste	White Paste	White Stick
Up to 2" (5.08 cm)	Up to 2" (5.08 cm)	3" (7.62 cm)	3" (7.62 cm)
300°F (150°C)	265°F (130°C)	400°F (204°C)	300°F (150°C)
10,000 psi/72 hrs.	10,000 psi/72 hrs. (68.9)	10,000 psi/72 hrs. (68.9)	10,000 psi/72 hrs. (68.9)
Metal	Metal	Stainless Steel, Aluminum	Metal
Yes	No	Yes	Yes

50 ml tube - 339604 250 ml tube - 449139

50 ml tube - 232097 250 ml tube - 235280

50 ml tube - 231701 250 ml tube - 235608

19 g stick - 463973

Semi-Solid

• If the sealant (LOCTITE® 545 Thread Sealant, LOCTITE® 565 PST Thread Sealant, LOCTITE® 567 PST Thread Sealant, or LOCTITE® 561 Pipe Sealant) will be applied below 40°F (5°C), pre-treat with LOCTITE® 7649 Primer N.

ODC-Free Cleaner and Defreaser.

HENKEL SOLUTIONS	LOCTITE® 55	LOCTITE® 545
Description	Cord	Purple Liquid
Maximum Thread Size	4" (10.16 cm)	Up to 2" (5.08 cm)
Temperature Resistance	300°F (150°C)	300°F (150°C)
Maximum Pressure Resistance (psi)/Cure Time (N/mm²)	10,000 psi/instant (68.9)	10,000 psi/24 hrs. (68.9)
Substrate to be Sealed	Metal, Plastic or Both	Metal
Instant Low Pressure Seal	Yes	No

Package Size & IDH

5,700 inches (150 m) - 270135 5,700 inches (150 m) - 342134 5,700 inches (150 m) - 1061210 1,968 inches (50 m) - 483282

50 ml bottle - 232095 250 ml tube - 1327769

Recommended for fine threaded fittings as used in hydraulic and pneumatic installations and small fittings in general.



A general-purpose instant sealant for tapered and straight/ tapered fittings.



Medium strength, general purpose sealant for use on coarse, threaded components.



Withstands temperatures to 400°F with excellent solvent resistance. Locks and seals tapered pipe threads and fittings, including high pressure applications. Disassembles with hand tools.



Semi-solid stick form is convenient, portable, and less messy. Formulated for fast, reliable curing on metal, tapered pipe threads and fittings. LOCTITE® 561 PST Pipe Sealant provides high pressure sealing and withstands continuous operating temperatures of -65°F to 300°F (-54°C to 150°C).

ADDITIONAL PRODUCTS

Name	Features
LOCTITE [®] 572	Easy application by hand. For use on construction pipe sealing.
LOCTITE® 542	Medium strengh. The thixotropic nature reduces the migration of liquid product after application to the substrate.
LOCTITE [®] 569	Low strength. Original hydraulic sealant.
LOCTITE® 5651	Low strength. Easy application by hand. For use on construction pipe sealing.



Can be safely applied on metal and plastic threaded fittings. Potable water: NSF/ANSI 61 UL Listed and Ceritified to CSA International.

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- » NO SHIMMING EFFECT CONTROLLED TOLERANCES, NO NEED FOR RE-TORQUING
- » FILL ALL VOIDS REDUCE THE NEED FOR A FINE SURFACE FINISH OF FLANGES
- » PARTS CAN BE DISASSEMBLED EASILY EVEN AFTER EXTENDED SERVICE
- » RESISTS HIGH PRESSURE WHEN FULLY CURED





YES

Positioning

cut gaskets

DOES THE EXISTING GASKET NEED TO BE USED AS A SHIM?

Helpful Hints:

- If there are traces of old gasket left on the parts to be sealed, clean with LOCTITE® 790 Chisel Gasket RemoverLOCTITE® 565 PST Thread Sealant, LOCTITE® 567 PST Thread Sealant, or LOCTITE® 561 PST Pipe Sealant will be applied below 40°F (5°C), pre-treat with LOCTITE® 7649 Primer N.
- All parts must be clean and dry before sealing use $\textsc{LOCTITE}^\circledast$ ODC-Free Cleaner and Degreaser.
- Anaerobic products cure between metal surfaces with the absence of air.

NO

Are you sealing a rigid or a stamped flange?

Rigid

HENKEL SOLUTIONS	LOCTITE® 518	LOCTITE® 510
Color	Red	Pink
Gasket Type	Formed-in-place	Formed-in-place
Gap Fill	o.o10" (o.25 mm)	o.o10" (o.25 mm)
Cure Method	Anaerobic	Anaerobic
Fixture/Cure Time	N.A./24 hrs.	N.A./24 hrs.
Temperature Resistance (Continuous/Intermittent)	300°F (150°C)/N.A.	400°F (204°C)/N.A.
Instant Seal	Excellent	Excellent
Water/Glycol Resistance	Excellent	Excellent
Package Size & IDH	50 ml tube - 231697 300 ml cart 235269	50 ml tube - 235255 300 ml cart 231352

ADDITIONAL PRODUCTS Name Features For flexible applications. LOCTITE® 515 Gasket Cure speed: Unprimed - 1 to 12 hours. **Eliminator Flange Sealant** Primed - 15 minutes to 2 hours. For flexible applications, high LOCTITE® 5127 Gasket elongation. Unprimed - 4 to 24 hours. Eliminator Flange Sealant Primed - 1 to 24 hours.

Fast curing, large gaps. Unprimed - 1 to 12 hours.

Primed - 15 minutes to 2 hours.

LOCTITE® 574 Gasket Eliminator Flange Sealant

Solvent. LOCTITE® 790 Chisel Dry time: Leave on surface for 5 to 10 minutes. **Gasket Remover** Wipe/scrape clean.



Recommended for use on rigid iron, steel and aluminum flanges. Spray LOCTITE® 7649 Primer N on only one surface.



850 ml cart. - 939535

High temperature. Product has a temperature range to 400°F (204°C) with excellent solvent and chemical resistance. Makes or dresses gaskets in rigid assemblies. Eliminates gasket compression set.

Stamped

LOCTITE® 587	LOCTITE® 596	LOCTITE® Instant Gasket	LOCTITE® 534
Blue	Red	Black	Purple
Formed-in-place	Formed-in-place	Formed-in-place	Use with cut gasket
o.250" (6.35 mm)	o.250" (6.35 mm)	o.250" (6.35 mm)	N.A.
Moisture (RTV)	Moisture (RTV)	Moisture (RTV)	Anaerobic
50 min.	N.A./50 min.	5 min.	N.A.
400°F (204°C) 482°F (250°C)	600°F (316°C)	450°F (232°C) 482°F (250°C)	300°F (150°C)/N.A.
Excellent	Excellent	Excellent	Excellent
Excellent	N.A.	Excellent	N.A.
85 g tube - 231482 370 g cart 576854	85 g tube - 743065 85 g tube - 778136	90 ml - 743912 190 ml - 743913	19 g stick - 731749 19 g stick - 640804



All types of flanges including stamped sheet metal. Designed for superior bonding properties to oil contaminated metals.



High temperature silicone sealant makes the repair of industrial furnaces, ovens, boilers, exhaust stacks, high temperature stacks, ducting and heating elements.



Makes high-performance, leakproof gaskets in one minute. Equipment can be returned to service immediately. Blowout resistant. Outperforms precut gaskets.



No mess semi-solid formula offers added control and ease of use. Patented package is portable and won't leak or spill. Seals and holds the heaviest gaskets in place during assembly. Solvent-free and low odor. Suitable to 300°F (150°C).

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RETAINING Securing Cylindrical Assemblies

- » BOND NON-THREADED CYLINDRICAL METAL ASSEMBLIES
- » HIGH AND MODERATE STRENGTH PRODUCTS CAN CARRY HIGH LOADS AND ELIMINATE FRETTING
- » FILL ALL VOIDS PREVENT CORROSION
- » REDUCE THE NEED FOR CLOSE TOLERANCES
- » 100% CONTACT LOAD AND STRESS ARE DISTRIBUTED EVENLY OVER THE JOINT



IS THE ASSEMBLY BADLY WORN?

Helpful Hints:

- If the retaining compound will be applied below 40°F (5°C), pretreat with LOCTITE® 7649 Primer N.
- All parts must be clean and dry before sealing use LOCTITE® ODC-Free Cleaner and Degreaser.
- If the parts have been in contact with washing or cutting fluids containing nitrates, wash with hot water.

YES - GAPS UP TO 0.020" (0.5 MM)

NO - GAPS TO 0.015" (0.4 MM)

Do you require low, medium or high strength?

Medium Strength

LOCTITE® 609

Medium

2,300 psi (15.8)

Up to 0.005" (0.1 mm)

300°F (150°C)

10 min./24 hr.

50 ml bottle - 232100

250 ml bottle - 235286

250 ml bottle - 30998

High Stength

Do you require a high viscosity (slower flowing) or a low viscosity (faster flowing) product?

LOCTITE® 638 (Up)

High

4,200 psi (29)

Up to 0.01" (0.25 mm)

356°F (180°C)

15 min./24 hr.

50 ml bottle - 1800356

250 ml bottle - 1800355

High Viscosity

Low Viscosity

LOCTITE® 648 (Up)

High

4,480 psi (31)

Up to 0.006" (0.15 mm)

356°F (180°C)

10 min./24 hr.

50 ml bottle - 1800575

250 ml bottle - 1800574

HENKEL SOLUTIONS	LOCTITE® 660
Strength Required	High
Shear Strength (N/mm²)	3,335 psi (23)
Diametrical Clearance	Up to 0.020" (0.5 mm)
Temperature Resistance	300°F (150°C)
Cure Time (Setup/Full Strength)	20 min./24 hr.

Package Size & IDH

50 ml tube - 231699

LOCTITE® 641

Low

1,700 psi (11.7)

Up to 0.006" (0.15 mm)

300°F (150°C)

20 min./24 hr.

Low Strength

50 ml bottle - 387885 250 ml bottle - 1496874 250 ml bottle - 45081

Recommended for parts that will need subsequent dismantling, i.e. retention of bearings onto shafts and into housings.



LOCTITE® 668

Medium

1,870 psi (12.8)

Up to 0.005" (0.1 mm)

400°F (204°C)

30 min./24 hr.

A high temperature retaining compound in a revolutionary semi-solid formula. Patented, no-mess package offers added convenience and portability. Ideal for gaps up to 0.005" (0.1 mm) on the diameter. Withstands temperatures to 400°F (204°C).



Maximum strength. For use where high dynamic force or cyclic loading is expected. Offers high temperature performance and oil tolerance.



Press Fit/High Strength/Rapid Cure. Offers high temperature performance and oil tolerance.

*	Requires	heat	cure	to	achieve	temperature	resistance
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ADDITIONAL PRODUCTS		
Name	Features	
LOCTITE [®] 680 மு	Gives best resistance to dynamic, axial and radial loads. Recommended for retaining shafts, gears, pulleys, and similar cylindrical parts.	
LOCTITE® 620	Particularly suitable for applications where temperature resistance up to 200°C is required. Requires heat cure to achieve temperature resistance.	
LOCTITE [®] 603	For close-fitting parts with light contamination. Typical applications include retaining roller bearings or oil impregnated bushings into housings.	



Used for repairing worn coaxial parts without remachining; enables reuse of worn bearing seats, keys, splines, tapers, or for retaining shims.



A controlled strength retaining compound that is ideal for cylindrical parts that require disassembly.

LOCTITE.

BONDERITE.

TECHNOMELT.

TEROSON.

AQUENCE.

Henkel products are designed to meet the specifications and testing standards of a variety of agencies. Because such standards change or may be modified, no warranty is given regarding such compliance. The information provided may be used as a quick reference tool to aid in design or application. For up-to-the-minute information on agency approvals, or to inquire about additional agency approvals, please contact Henkel Product Management team or local Technical Support team.

Contact us at: www.henkel.com



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