

LOCTITE®

ANAEROBICS SELECTOR GUIDE

General Manufacturing & Maintenance

Henkel





A trusted partner in manufacturing & maintenance.

LOCTITE adhesives and sealants are engineered to meet a broad range of applications. With our world-class, innovative product technologies and our extensive industry experience, Henkel can help you optimize product performance and reduce overall costs.





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THREADLOCKING

Locking of threaded fasteners

▶ ARE THE PARTS ALREADY ASSEMBLED?

Helpful Hints:

- Clean parts with LOCTITE® SF 7070 ODC-Free Cleaner and Degreaser before applying the adhesive.
- If the threadlocker will be applied below 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

▶ HENKEL SOLUTIONS

LOCTITE® 290

Fastener Size	1/16" TO 1/2" (M2 TO M12)
Strength	High
Cure Time (Fixture/Full Strength)*	20 min./24 hr.
Breakaway/Prevail Torque (N.m)	10/29
Temperature Resistance for Continuous Service	150°C
Package Size & IDH	50 ml bottle - 531724 250 ml bottle - 848069

* Typical value @ 22°C

ADDITIONAL PRODUCTS

Name	Strength/ Color	Breakaway/ Prevail Torque [N.m]	Features
LOCTITE® 220	Low - Blue	9/19	Removable grade, wicking, for small threads of 1/4" (M6) or smaller
LOCTITE® 270	High - Red	26/36	Fasteners up to 3/4" (M20)
LOCTITE® 271	High - Red	28/31	Fasteners up to 1" (Up to M25)
LOCTITE® 272	High - Orange	22/24	High Temp up to 11/2" (M36)



Recommended for locking pre-assembled fasteners, i.e. instrumentation screws, electrical connectors, and set screws. Also seals porosities in welds and metal parts.

LOCTITE® PRIMERS

Use LOCTITE® Primer to:

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.
5. Act as a cleaning agent.



- PREVENTS LOOSENING FROM SHOCK AND VIBRATION
- SINGLE COMPONENT – CLEAN AND EASY TO APPLY
- CAN BE USED ON VARIOUS SIZES OF FASTENERS – REDUCES INVENTORY COSTS
- FILLS GAP BETWEEN THREADS AND UNITIZES THE ASSEMBLY
- STOPS RUST AND CORROSION



NO

What strength do you require?

Low - Purple	Medium - Blue	High - Red	Permanent - Red
	Oil tolerant		
LOCTITE® 222	LOCTITE® 243	LOCTITE® 263	LOCTITE® 277
Up to 1/4" (Up to M6)	1/4" to 3/4" (M6 to M20)	Up to 1"	For large bolts > 7/8" (>20mm)
Low	Medium	High	Permanent
10 min./24 hr.	10 min./24 hr.	10 min./24 hr.	60 min./24 hr.
6/3	20/7	32/32	31/31
150°C	180°C	180°C	150°C
50 ml bottle - 848063 250 ml bottle - 848062	10 ml bottle - 1427418 50 ml bottle - 1367282 250 ml bottle - 531707 1 litre bottle - 833788	50 ml bottle - 1367281 250 ml bottle - 1511183	50 ml bottle - 531723 250 ml bottle - 531722
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.	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.	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, anti-corrosion and protection fluids. Heat required for removal.	High strength adhesive for locking and sealing large bolts and studs 1" (25 mm) or larger in diameter. Heat may be required to weaken bond before parts can be disassembled.

Name	Color	Viscosity	Base	On-Part Life	Dry Time	Package Size & IDH	Primer is optional with: Active surfaces: Brass, copper, bronze, iron, soft steel, nickel.
7649 Primer N	Clear/Green	2	Acetone	30 days	30 to 70 seconds	100 ml - 849297	Primer is required with: Inactive surfaces: Aluminum, stainless steel, magnesium, zinc, black oxide, cadmium, titanium, and others.
7471 Primer T	Amber	2	Acetone/ Isopropanol	7 days	30 to 70 seconds	100 ml - 849296	

THREAD SEALING

Sealing of threaded pipes & connectors

▶ ARE THE PARTS METAL OR PLASTIC?

Helpful Hints:

- If the sealant (LOCTITE® 545 Thread Sealant, LOCTITE® 565 Thread Sealant, LOCTITE® 567 Thread Sealant, or LOCTITE® 561 Pipe Sealant) will be applied below 5°C, pre-treat with LOCTITE® 7649 Primer N.
- All parts must be clean and dry before sealing - use LOCTITE® SF 7070 ODC-Free Cleaner and Degreaser.

**PLASTIC AND/
OR METAL**

Cord

▶ HENKEL SOLUTIONS

LOCTITE® 55

Description	Cord
Maximum Thread Size	4" (10.16 cm)
Temperature Resistance	150°C
Maximum Pressure Resistance (N/mm ²)/Cure Time	10,000 psi (68.9)/instant
Substrate to be Sealed	Metal, Plastic or Both
Instant Low Pressure Seal	Yes
Package Size & IDH	150 metres - 1752446

ADDITIONAL PRODUCTS

Name	Features
LOCTITE® 572	Easy application by hand. Slow curing. For use on construction pipe sealing.
LOCTITE® 545	Low strength, fast curing for hydraulic / Pneumatic fittings.



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

- 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
- REPLACES TAPES AND PASTES



METAL PARTS

Are the threads fine or coarse?

Fine		Coarse	
LOCTITE® 542 [Hydraulic & Pneumatic]	LOCTITE® 565	LOCTITE® 567	LOCTITE® 577
Brown Liquid	White to off White Paste	White Paste	Yellow Paste
Up to 3/4" (1.90 cm)	Up to 2" (5.08 cm)	3" (7.62 cm)	Up to 3" (7.62 cm)
150°C	150°C	250°C	180°C
10,000 psi (68.9)/24 hrs.	10,000 psi (68.9)/72 hrs.	10,000 psi (68.9)/72 hrs.	10,000 psi (68.9)/72 hrs.
Metal	Metal	Stainless Steel, Aluminum	Metal
No	Yes	Yes	No
50 ml bottle - 848735 250 ml bottle - 848736	50 ml bottle - 1751917 250 ml bottle - 1752552	50 ml bottle - 2146962 250 ml bottle - 2146695	50 ml bottle tube - 2121780 250 ml bottle tube - 2121367
Recommended for fine threaded fittings as used in hydraulic and pneumatic installations and small fittings in general. Carries German DVGW approval (NG-5146 AR 0855) Meets BS 6956 type A for sealing gas fittings. **	A general-purpose instant sealant for tapered and straight/tapered fittings.	Withstands temperatures to 204°C with excellent solvent resistance. Locks and seals tapered pipe threads and fittings, including high pressure applications. Disassembles with hand tools.	Medium strength, general purpose sealant for use on coarse, threaded components.

** All approvals are region specific. Please contact your Henkel Sales Representative for further information.

GASKETING

Sealing and Flanges

▶ 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® SF 790 Chisel Gasket Remover.
- All parts must be clean and dry before sealing – use LOCTITE® SF 7070 ODC-Free Cleaner and Degreaser.
- Anaerobic products cure between metal surfaces with the absence of air.

Rigid

▶ HENKEL SOLUTIONS	LOCTITE® 510	LOCTITE® 518 
Color	Pink	Red
Gasket Type	Formed-in-place	Formed-in-place
Gap Fill	0.010" (0.25 mm)	0.010" (0.25 mm)
Cure Method	Anaerobic	Anaerobic
Fixture/Cure Time	N.A./24 hrs.	N.A./24 hrs.
Temperature Resistance (Continuous/Intermittent)	204°C/N.A.	150°C/N.A.
Instant Seal	Excellent	Excellent
Water/Glycol Resistance	Excellent	Excellent
Package Size & IDH	50ml tottle tube - 848390 250ml tottle tube - 848731 300ml cartridge - 910888	50ml tottle tube - 2118119 250ml tottle tube - 2118117 250ml cartridge - 2136699

ADDITIONAL PRODUCTS

Name	Features
LOCTITE® 515 Gasket Eliminator Flange Sealant	For flexible applications. Cure speed: Unprimed - 1 to 12 hours. Primed - 15 minutes to 2 hours.
LOCTITE® 790 Chisel Gasket Remover	Solvent. Dry time: Leave on surface for 5 to 10 minutes. Wipe/scrape clean.
LOCTITE® SI 5920	Designed for high temperature resistance and electrical insulating applications. Temperature resistance upto 360°C.



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



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





- 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



NO

Are you sealing a rigid or a stamped flange?

Stamped

LOCTITE® 574	LOCTITE® SI 587	LOCTITE® SI 596	LOCTITE® SI 5900
Red	Blue	Red	Black
Formed-in-place	Formed-in-place	Formed-in-place	Formed-in-place
0.010" (0.25 mm)	0.250" (6.35 mm)	0.250" (6.35 mm)	0.240" (6 mm)
Anaerobic	Moisture (RTV)	Moisture (RTV)	Moisture (RTV)
N.A./24 hrs.	50 min. (Skin formation)	50 min. (Skin formation)	20 min. (Skin formation)
150°C/N.A.	204°C/250°C	316°C	204°C/N.A.
Excellent	Excellent	Excellent	Excellent
Excellent	Excellent	Excellent	Excellent
50ml tottle tube - 848739 250ml tottle tube - 848734	95g tube - 1266356 300ml cartridge - 1246389	300ml cartridge - 317667	300ml cartridge - 1257126
			
Recommended for sealing rigid & semi-rigid metal flanges. Fast curing. Gives instant sealing.	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.	Superior flexibility, withstand high relative joint movement. High adhesion, gives instant seal. Low odor, Low volatility, Non-corrosive.

RETAINING

Securing cylindrical assemblies

► IS THE ASSEMBLY BADLY WORN?

Helpful Hints:

- If the retaining compound will be applied below 5°C, pre-treat with LOCTITE® 7649 Primer N.
- All parts must be clean and dry before sealing – use LOCTITE® SF 7070 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)**

► HENKEL SOLUTIONS

LOCTITE® 660

Strength Required	High
Shear Strength (N/mm ²)	3,335 psi (23)
Diametrical Clearance	Up to 0.020" (0.5 mm)
Temperature Resistance	150°C
Cure Time (Setup/Full Strength)	20 min./24 hr.
Package Size & IDH	50ml bottle - 1752417

ADDITIONAL PRODUCTS

Name	Features
LOCTITE® 680 	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 (gap up to 0.1 mm) 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.

- 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



NO - GAPS TO 0.015" [0.25 MM]

Do you require low, medium or high strength?

Low Strength		Medium Strength	High Strength	
			High Viscosity	Low Viscosity
LOCTITE® 641		LOCTITE® 609	LOCTITE® 638 	LOCTITE® 648 
Low		Medium	High	High
1,700 psi (11.7)		2,300 psi (15.8)	4,200 psi (29)	4,480 psi (31)
Up to 0.006" (0.15 mm)		Up to 0.005" (0.1 mm)	Up to 0.01" (0.25 mm)	Up to 0.006" (0.15 mm)
150°C		150°C	180°C	180°C
20 min./24 hr.		10 min./24 hr.	15 min./24 hr.	10 min./24 hr.
50ml bottle - 848752 250ml bottle - 848750		50ml bottle - 848744 250ml bottle - 848745	50ml bottle - 1865160 250ml bottle - 1865048	50ml bottle - 1865163 250ml bottle - 1865164
 <p>A controlled strength retaining compound that is ideal for cylindrical parts that require disassembly.</p>		 <p>Recommended for parts that will need subsequent dismantling, i.e. retention of bearings onto shafts and into housings.</p>	 <p>Maximum strength. For use where high dynamic force or cyclic loading is expected. Offers high temperature performance and oil tolerance.</p>	 <p>Press Fit/High Strength/Rapid Cure. Offers high temperature performance and oil tolerance.</p>

LOCTITE®
BONDERITE®
TECHNOMELT®
TEROSON®
AQUENCE®

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