



# Maintenance, Repair and Overhaul Solutions Guide & Product Selector



Excellence is our Passion

## Making The Right Choice...

For every industrial maintenance, repair and overhaul challenge, Loctite® products have the right solution.

Designed to extend equipment life, increase production reliability and prevent common failures, the Loctite® product range is a maintenance professionals most valuable tool.

Proven with over 50 years industrial experience, typical product applications include;

- Securely lock any threaded fastener or fitting against vibration and shock load.
- Seal and protect threaded joints and components from corrosion.
- Instantly replace gaskets of any size or shape.
- Retain bearings, bushes and cylindrical parts into housings or onto shafts - even if worn.
- Protect metal parts from corrosion, galling and seizing.
- Permanently and quickly bond a wide variety of materials.
- Make emergency repairs to burst pipes and tanks.
- Clean, degrease and convert rust.

## More Than A Product...

Our highly experienced Loctite® Application Engineers are committed to providing the highest level of technical and product support in the industry.

Working closely with our local industrial suppliers, our Application Engineers provide full process support from problem solving to onsite maintenance and product training.

Within this Solutions Guide & Product Selector you will find everything you need to know about Loctite® brand industrial grade products. Whether for an emergency repair or preventative maintenance, you will find it easy to select the Loctite® product you need. For further information visit our website [www.loctite.com.au](http://www.loctite.com.au) or call the Loctite® Customer Support Line 1300 88 55 56.

## Committed To Innovation...

From its founding in 1953, based on the world's first anaerobic product, Loctite® has achieved success through innovation. An unrelenting commitment to continuous research and development has resulted in the most technically advanced range of industrial maintenance products available today. Products that increase equipment reliability, reduce costs and improve quality throughout industry. Here are some of our newest innovations featured throughout this catalogue.

### Loctite® Sticks

The quality and performance you trust in a new and more convenient semi-solid stick formula. These patented new stick products offer greater flexibility for tougher applications, especially overhead, under or around machinery, and on components that can not be moved. They're compact, making them easy to carry from job to job and easy to store in a tool box, tool belt or pocket. The semi-solid formula means that they won't spill or leak. Now available in an expanded range including two threadlockers, a pipe sealant, an anti-seize and primer.

### Loctite® Reliability with a twist!

#### Threadlockers and Thread Sealants

Introducing the Loctite® 243 and Loctite® 263. Formulated to deliver best performance on active and passive metals, increased oil tolerance and improved high temperature performance.

#### Loctite® Freeze & Release

The solution for releasing seized or corroded parts – SHOCK FREEZE. Loctite® Freeze & Release instantly chills seized and rusted parts (bolts, nuts, studs). The exceptional shock freeze effect causes microscopic cracks in the layer of rust, allowing the lubricating ingredient to wick directly into the rust by capillary action. The assembly can be easily dismantled after allowing 1-2 minutes reaction time. Released parts remain lubricated and protected from corrosion. (Refer to page 26 for more details).





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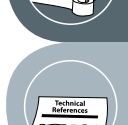
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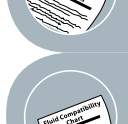
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# THREADLOCKING

## 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

### ► ARE THE PARTS ALREADY ASSEMBLED?

Low – Purple

Easy Disassembly

Medium – Blue

Improved Oil Tolerance

Stick Applicator

Use on all Metals

Overhead Applications

### ► HENKEL SOLUTIONS

LOCTITE® 222

LOCTITE® 243

LOCTITE® 248

Fastener Size	Up to 36mm (M12)	Up to 36mm (M36)	Up to 20mm (M20)
Colour	Purple	Blue	Blue
Strength	Low	Medium	Medium
Fixture Time*	20 min	10 min	5 min
Full Strength*	24 hrs	24 hrs	24 hrs
Breakloose Torque* Nm (lb.in.)	14 (120)	24 (210)	20 (177)
Prevailing Torque* Nm (lb.in.)	14 (120)	4 (35)	-
Temperature Range	-54°C to +150°C	-54°C to +180°C	-54°C to +150°C
Recommended Primer	7471/7088	7649/7088	7649/7471
Disassembly Method	Hand Tool	Hand Tool	Hand Tool
Package Size & IDH	10 ml bottle - 471660 50 ml bottle - 231499 250 ml bottle - 1496888	10 ml bottle - 1311375 50 ml bottle - 1311321 250 ml bottle - 1311323	19 g stick - 933728

\* M10 steel nut @ bolt, cured for 24 hours @ 22°C and pre-torqued to 5Nm.

\* Breakaway torque. For further information refer to product Technical data Sheet.

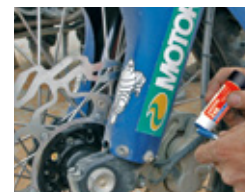
† Prevailing Torque measured as per ISO 10964



Recommended for low strength threadlocking of adjusting screws, counter sunk head screws and set screws; on collars, pulleys, tool holders, and controllers.



High performance on various metals, even without use of a primer. Improved reliability in high temperature applications and on oil contaminated surfaces.



Medium strength semi-solid stick applicator ideal for hard to reach applications. Recommended for fastener applications where removal is required.

Refer to page 31 for Application Procedures.



NO

YES

What strength do you require?

High - Red

Very High - Red

Medium/High - Green

Improved Oil Tolerance

Stick Applicator

High Thermal Stability

Very High Strength

Wicking Grade

Use on all Metals

No Mess

High Chemical Resistance

Fills Porosity in Welds / Castings

LOCTITE® 263

LOCTITE® 268

LOCTITE® 272

LOCTITE® 277

LOCTITE® 290

Up to 36mm (M36)

Up to 20mm (M20)

Up to 36mm (M36)

M25 and larger

Up to 12mm (M12)

Red

Red

Red / Orange

Red

Green

High

High

High

High

Medium/High

10 min

5 min

60 min

30 min

20 min

24 hrs

72 hrs

24 hrs

24 hrs

6 hrs

39 (345)

37 (330)

23 (200)\*

38 (340)

30 (270)

25 (220)<sup>1</sup>

-

25 (220)\*

40 (350)

40 (350)

-54°C to +180°C

-54°C to +150°C

-54°C to +232°C

-54°C to +150°C

-54°C to +150°C

747<sup>1</sup>747<sup>1</sup>7649/747<sup>1</sup>

7649

7649

Direct Heat

Direct Heat

Direct Heat

Direct Heat

Direct Heat

10 ml bottle - 1374241  
50 ml bottle - 1331618  
250 ml bottle - 1331536

19 g stick - 933730

50 ml bottle - 88442

50 ml bottle - 232658  
250 ml bottle - 1496860

10 ml bottle - 1175229  
50 ml bottle - 1496855  
250 ml bottle - 1225613



High performance on various metals, even without use of a primer. Improved reliability in high temperature applications and on oil contaminated surfaces.

High strength semi-solid stick applicator ideal for hard to reach places. Recommended for heavy duty applications such as transmission bolts and construction equipment.

High temperature threadlocker with outstanding chemical resistance. Suitable for sealing most refrigerants.

Very high strength threadlocker with outstanding chemical resistance.

Recommended for locking pre-assembled fasteners such as instrument screws, electrical connectors and setscrews.



# THREADLOCKING

Invented as a revolutionary method to lock and seal threaded fasteners, Loctite® brand anaerobic threadlockers have found wide acceptance in a range of applications – from delicate electronic components to heavy construction equipment. Loctite® brand threadlockers are available in varying viscosities and strengths for virtually any application, including exposure to extreme environments.

## FEATURES & BENEFITS

**Prevents Loosening of Fasteners** – Sets to a thermoset plastic that fills microscopic gaps between interfacing threads preventing any movement.

**Seals Against Corrosion** – Seals the joint preventing ingress of moisture and other corrosive gases, chemicals and fluids.

**Provides Correct Lubricity** – Lubrication properties yield controlled torque tension curves - ideal for assembly of equipment to specified torque values.

**Controlled Strengths** – Available in varied controlled strengths to suit all applications – low, medium and high.

**Suitable for all Fastener Sizes** – Eliminates the need to hold stock of expensive mechanical fasteners.

**Easy to Apply** – Simply apply to the thread and assemble. Excess will not cure and can be easily wiped away.

## DID YOU KNOW?

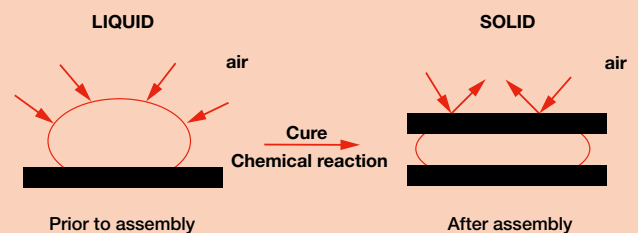
### How does an Anaerobic Adhesive work?

Anaerobic adhesives are single-component materials which cure at room temperature when deprived of contact with oxygen.

Curing begins when the two metal parts are mated together and any adhesive outside of the joint or thread remains liquid.

The capillary effect of the anaerobic liquid adhesive carries it into even the smallest gaps to fill the joint.

The cured adhesive is then 'keyed' to the surface roughness of the parts forming a tough thermoset plastic, which bonds the components and seals against moisture or chemical attack.



# THREAD SEALING



Loctite® brand liquid thread sealants seal and secure metal pipes and fittings, filling the space between threaded metal parts and curing to prevent leakage. Designed for low and high pressure applications, liquid thread sealants seal instantly for low pressure testing. When fully cured, they seal to the burst strength of most piping systems.

## FEATURES & BENEFITS

**Complete Seal** – Fills voids between threads creating a 100% seal, preventing leakage caused by vibrational loosening, temperature cycling, corrosion and extreme pressures.

**Locks & Seals in any Position** – Seals independent of assembly torque allowing correct alignment of fittings.

**Does Not Block Pipe System** – Uncured anaerobic sealant is completely soluble in hydraulic fluid, diesel oils, petrols and most industrial chemicals.

**Instant Low Pressure Seal** – Suitable for immediate operation or low pressure testing of newly sealed threads.

**Lubricates During Assembly** – Eliminates risk of overstressing fittings or castings, common with alternative thread sealing methods.

**Easy Application & Disassembly** – Simply apply directly to the thread and assemble. Excess sealant can be wiped away without solvents or chemicals. Disassembled with hand tools.

Replaces most tapes and hemp/paste combinations.

## DID YOU KNOW?

Industry loses millions of dollars annually due to leakage of fluids through pipe and tubing. Loctite® brand sealants prevent fluid loss, minimising cost of wastage, maintenance and down-time.

The table below details the significant potential cost of a leaking hydraulic fitting over a one year period.

Leakage Rate	Loss per Day (ltr)	Loss per Year (ltr)	Annual Cost (\$/Year)
One drop in 10 sec.	0.56	204.98	\$1,025
One drop in 5 sec.	1.12	409.97	\$2,050
One drop per sec.	5.62	2049.84	\$10,250

*Based on Hydraulic Fluid: \$5.00 / litre*



# 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 PIPE THREADS METAL OR PLASTIC?

	Plastic (or Metal & Plastic)		
WHAT WILL FLOW THROUGH PIPES?	Water only		Hydraulic /
WILL OPERATING PRESSURE EXCEED 300KPA?	Yes	No	
ARE THE THREADS FINE OR COARSE?	Up to 100mm (4")		Fine - up to 19mm ( 3/4")
WHAT APPROVALS ARE REQUIRED?	Potable Water/Gas		Gas
UNIQUE FEATURES	Allows Back off to Align Fittings	Hot & Cold Water	Will not contaminate critical assemblies
► HENKEL SOLUTIONS	LOCTITE® 55	LOCTITE® 5331	LOCTITE® 569
Description	Cord	White Paste	Brown Liquid
Maximum Thread Size	100mm (4")	76mm (3")	19mm (3/4")
Instant Low Pressure Seal	Yes	Yes (up to 50kPa)	No
Temperature Range	-54°C to +150°C	-54°C to +150°C	-54°C to +150°C
Disassembly Strength	Low	Low	Low
Recommended Primer	-	-	7471/7649
Package Size & IDH	150 m spool - 473136	100 ml tube - 142492	50 ml bottle - 234473 250 ml bottle - 234475

\*For further information refer to product Technical data Sheet.



Faster, more versatile pipe sealant which out-dates traditional tapes and hemp/pastes combinations. Provides an instant seal and allows back-off to align fittings.

Approvals

- Plumbing Safety License AS/NZS 4020:2002 Cert No. 8638 (Potable Water)
- AGA Certificate 6007 to 2400kPa (Gas).



Recommended for use on low pressure threaded plastic or plastic/metal fittings carrying hot or cold water.

Approvals

- German DVGW No 96.07e125 (Gas & Potable Water)
- German KTW (Potable Water)
- WRC approved to 85°C (Potable Water)



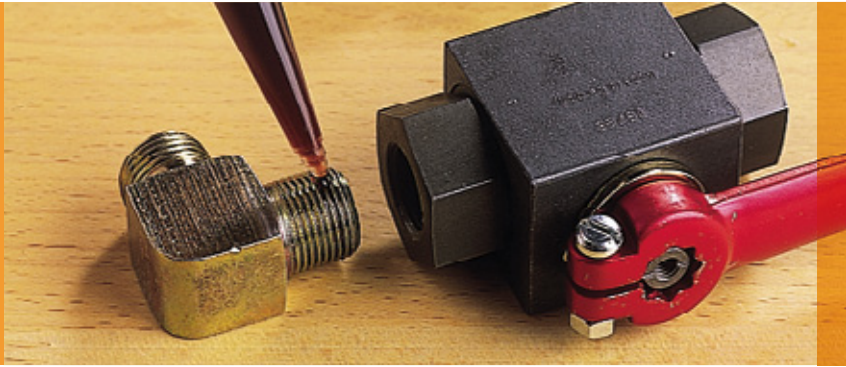
Recommended for fine threaded fittings as used in hydraulic and pneumatic applications.






Approvals

- AGA Certificate 3375 to 1050kPa (Gas)

Refer to page 32 for Application Procedures.





Metal Only				
Pneumatic	General Use			Steam/Gas
Yes				
Coarse - up to 25mm (1")	Coarse - up to 25mm (1")	Coarse - up to 76mm (3")		76mm (3")
No	No	Potable Water/Gas	Gas	No
Locks Threads (25Nm)	Overhead Applications	Locks Thread (17Nm)	High Temperature +204°C	For Steam Applications, high temperature
LOCTITE® 542	LOCTITE® 561	LOCTITE® 577	LOCTITE® 567 PST™	LOCTITE® 5770
Brown	Off White	Yellow	White	Off White
25mm (1")	25mm (1")	76mm (3")	76mm (3")	76mm (3")
No	Yes	Yes	Yes	Yes
-54°C to +150°C	-54°C to +150°C	-54°C to +150°C	-54°C to +204°C	-54°C to +280°C
Medium	Medium	Medium	Low	High
7471/7649	7471/7649	7649	7649/7471	7471
10 ml bottle - 470771 50 ml bottle - 1560050	19 g stick - 943428	50 ml tube - 229930 250 ml tube - 281823	6 ml tube - 234451 50 ml bottle - 473168 250 ml bottle - 234453	50 ml tube - 1365034
				
Recommended for threaded fittings as used in hydraulic and pneumatic installations. Approvals • German DVGW No 96.02e125 (Gas & Potable Water) • BS 6956 Type A (Gas) • WRC approved to 85°C (Potable Water)	Semi-solid stick formula offers added convenience and portability. Formulated for fast, reliable curing on metal, tapered pipe threads and fittings. Provides high pressure sealing at operating temperatures up to 150°C.	Recommended for all coarse metal threads. Suitable for applications at low temperatures requiring fast cure. Approvals • Plumbing Safety License AS/ NZS 4020:2002 Cert No. 20079 (Potable Water) • AGA Certificate 4787 to 2600kPa (Gas)	Recommended for all coarse metal threads where slow cure is required to prolong time frame for adjusting valves and fittings. Approvals • AGA Certificate 3207 to 1050kPa (Gas)	High temperature thread sealant, designed to seal threaded pipe fittings in applications requiring continuous heat resistance of up to 280°C.



## GASKETING

### Sealing and Flanges

- » 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

#### ► WHAT SIZE IS THE GAP?

Less than 0.25mm (Anaerobic Sealants)

#### IS THE FLANGE RIGID OR FLEXIBLE?

Rigid (Metal to Metal)

#### WHAT IS THE FLANGE MATERIAL?

Steel

Alloy/Aluminium

All Metals

#### MAXIMUM TEMPERATURE

150°C

150°C

200°C

#### UNIQUE FEATURES

Use with Shims

Easy Disassembly

High Chemical Resistance

#### ► HENKEL SOLUTIONS

LOCTITE® 515

LOCTITE® 518

LOCTITE® 510

Gasket Type	Formed in Place	Formed in Place	Formed in Place
Flange Type (Elongation)	Rigid	Rigid	Rigid
Tack Free Time*	-	-	-
Low Pressure Seal	30 min	20 min	30 min
Temperature Range	-54°C to +150°C	-54°C to +150°C	-54°C to +200°C
Oil Resistance	Excellent	Excellent	Excellent
Water/Glycol Resistance	Good	Good	Excellent
Sensor Safe	Yes	Yes	Yes
Neutral Cure	-	-	-
Recommended Primer	7649/7471	7649/7471	7649
Package Size & IDH	6 ml tube - 209756 50 ml tube - 473169 300 ml cartridge - 265605	6 ml tube - 209759 25 ml syringe - 1329465 50 ml tube - 472904 300 ml cartridge - 135482	50 ml tube - 1496856 250 ml tube - 1496883

\* Varies with substrate. For further information refer to product Technical data Sheet.



Recommended for coating and re-using gaskets to improve sealing.  
Approvals  
• AGA certificate 2590 to 690kPa (Gas)



Recommended for use on rigid iron, steel and aluminium flanges e.g. aluminium gearbox and engine castings, etc.



Recommended for use on rigid metal parts e.g. cast iron components and pump housings, etc. operating at high temperatures.  
Approvals  
• AGA certificate 2590 to 690kPa (Gas)

Refer to page 33 for Application Procedures.



Up to 6.0mm (Silicone Sealants)				
Flexible (Stamped Metal Assemblies)				
Metal or Non-Metals				
200°C		260°C		315°C
Fast Cure	Highly Flexible	Hot Oil Resistance	Good Electrical Insulator	High Temperature Resistance
<b>LOCTITE® 5699 Grey Maxx®</b>	<b>LOCTITE® 598 Black Maxx®</b>	<b>LOCTITE® 587 Blue Maxx®</b>	<b>LOCTITE® 5920 Copper Maxx®</b>	<b>LOCTITE® Superflex Red</b>
Formed in Place	Formed in Place	Formed in Place	Formed in Place	Formed in Place
Flexible (100%)	Flexible (300%)	Flexible (350%)	Flexible (350%)	Flexible (300%)
30 min	25 min	30 min	40 min	30 min
30 min	40 min	30 min	40 min	30 min
-60°C to +200°C	-54°C to +260°C	-60°C to +260°C	-60°C to +316°C	-60°C to +315°C
Good	Excellent	Excellent	Good	Good
Good	Good	Good	Good	Good
Yes	Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes	No
-	-	-	-	-
95 g tube - 287301 300 ml cartridge - 473152	95 g tube - 640172	95 g tube - 332651 300 ml tube - 333949	85 g tube - 287437	80 ml tube - 135507 300 ml cartridge - 198817



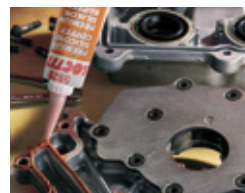
Designed for high torque applications. Remains flexible and withstands high vibration. Outstanding oil and shop fluid resistance. Non-corrosive, low odour.



Replacement for cork and paper cut gaskets on flanges and stamped sheet metal covers. Recommended for use where high vibration or flexing occurs. Can also be used with plastic parts. Oxygen sensor safe.



Recommended for sealing all types of flanges including stamped sheet metal where high flexibility and high oil or water glycol resistance is required. Oxygen sensor safe.



Single component RTV non-sag silicone paste for low volatility applications. Adheres to metal, glass, natural and synthetic fibres, wood, ceramics, and many plastic substrates. Oxygen sensor safe.



Recommended for sealing all of flanges including stamped sheet metal where high temperature resistance is required, e.g. assembly and repair of industrial furnaces, ovens, boilers, exhaust stacks and high temperature ducting.



# GASKETING

Loctite® brand Anaerobic and Silicone gasketing solutions are suitable for small and large gap flange assemblies. Formed-in-place, they can be applied to any shape and offer improved seal reliability compared to traditional pre-cut compression gaskets.

## FEATURES & BENEFITS

### Anaerobic Gaskets

Loctite® brand anaerobic gaskets remain liquid when exposed to air, but cure when confined between mating flanges. Anaerobic gasketing products are best suited for small gap applications and rigid metal-to-metal assemblies.

#### Features and Benefits;

- ✓ No Shimming Effect - controlled tolerances, no need for re-torquing.
- ✓ Fills all voids reducing the need for fine surface finish on flanges.
- ✓ Does not shrink when cured.
- ✓ Parts can be easily disassembled even after extended service.
- ✓ Resists high pressure when fully cured.

### Silicone Sealants

Loctite® brand silicone gasketing materials include unique products with excellent fluid and high temperature resistance. They are best suited for large gap applications and stamped metal assemblies where flange flexing occurs.

#### Features and Benefits;

- ✓ High gap fill and flexibility.
- ✓ High temperature and chemical resistance\*.

## DID YOU KNOW?

### What is a Formed-In-Place Gasket?

Formed-in-place gaskets are applied as a fluid sealant to one of the flange surfaces before the parts are assembled. When the parts are assembled the sealant spreads between the flanges, filling gaps, voids, scratches and surface irregularities.

After assembly the gasket cures and forms a durable seal.

Formed-in-place gaskets eliminate the inventory expense of stocking countless pre-cut gaskets.

### How do you remove baked-on gasket material?

Loctite® Chisel® Paint Stripper easily removes pre-cut gasket cement and formed-in-place gaskets in 10-15 minutes. Simply spray on, then wipe or scrap off residual gasketing material.

*(Refer to page 26 for further details).*

\*Refer to Technical Data Sheet



# RETAINING

Accepted as a standard method for assembling press and slip parts, Loctite® anaerobic retaining compounds fill the 'inner space' between components and cure to form a strong precision assembly. Formulated in a wide variety of viscosities, gap fills, flexibility and strength characteristics, Loctite® anaerobic retaining compounds are suitable for a broad range of industrial maintenance applications.



## FEATURES & BENEFITS

**Increased Assembly & Product Reliability** – Prevents damage caused by press or shrink fits such as wallowing, backlash and fretting corrosion.

**Fills all Voids & Ensures 100% Contact** – Fills infinite microscopic imperfections that exists on even the most precisely machined surfaces, thereby providing 100% contact between mating parts, ensuring load and stress is distributed evenly over the joint.

**Creates Stronger Industrial Assemblies** – Increases shear strength of mechanical assemblies and is suitable for a wider range of industrial applications from securing a metal locating pin to large diameter shaft bearings.

**Seals Against Corrosion** – Seals the assembly preventing ingress of moisture and other corrosive gases, chemicals and fluids.

**Replaces or Augments Mechanical Assemblies** – Reduces need for close tolerances, additional securing components and elaborate assembly methods, therefore reducing maintenance cost.

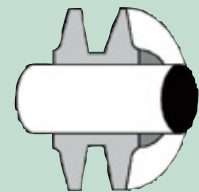
**Controlled Strengths** – Available in high & moderate strengths formulations to suit all applications. Parts can be disassembled using regular processes.

## DID YOU KNOW?

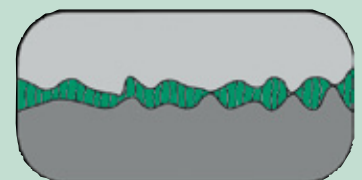
**Interference fits typically have only 20-40% effective contact area!**

Typically the contact area is limited to the peaks left behind by machining processes. Micro-movement during dynamic loading can shear these away, allowing the joint to fail. Tightening the machining tolerances to avoid this is a very expensive solution.

A Loctite® anaerobic retaining compound assures 100% contact, as well as eliminating "fretting corrosion" within the joint.



*Loctite® brand Retaining Compounds fill the microscopic peaks and valleys, ensuring maximum adhesion between mating surfaces*





## 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

### ► WHAT SIZE IS THE GAP?

	Yes (Gaps to 0.25mm)	
WHAT STRENGTH DO YOU REQUIRE?	Medium	Medium/High
MAXIMUM TEMPERATURE	150°C	
UNIQUE FEATURES	Easy Disassembly	General Purpose
► HENKEL SOLUTIONS	LOCTITE® 641	LOCTITE® 609

Colour	Yellow	Green
Strength	Medium	Medium
Fixture Time*	30 min	25 min
Full Strength*	24 hrs	24 hrs
Gap Fill* / Max Gap Fill	0.05mm* / 0.25mm	0.15mm* / 0.25mm
Compressive Shear Strength* N/mm <sup>2</sup> (psi)	6.5 (940)	15.8 (2,290)
Temperature Range	-54°C to +150°C	-54°C to +150°C
Recommended Primer	7471/7649	7649/7471
Disassembly Method	Pulley or Press	Press
Package Size & IDH	10 ml bottle - 469090 50 ml bottle - 1496859 250 ml bottle - 1496874	10 ml bottle - 471311 50 ml bottle - 234551 250 ml bottle - 234549

# Steel pin @ collar, cured for 24 hours @ 22°C.

\* Steel pin @ collar cured for 2 hours @ 121°C.

For further information refer to product Technical data Sheet.



A controlled strength retaining compound, ideal for cylindrical parts that require disassembly; e.g. retention of bearings onto shafts and into housings.



Recommended as a general purpose, low viscosity retaining compound. Use to bond rotors to shafts, secure bushings and sleeves, and augment press fits.



No (Gaps to 0.25mm)			Yes (Gaps to 0.5mm)	
High			Medium	High
150°C		232°C	150°C	
Slow Cure	Quick Cure	Very High Temperature	High Lubricity	Repairs Worn Parts
<b>LOCTITE® 635</b>	<b>LOCTITE® 680</b>	<b>LOCTITE® 620</b>	<b>LOCTITE® 232</b>	<b>LOCTITE® 660</b>
Green	Green	Green	Opaque Brown	Metallic Grey
High	High	High	Medium	Medium/High
30 min	30 min	60 min	4–6 hrs	10 min
72 hrs	24 hrs	24 hrs	72 hrs	24 hrs
0.05mm / 0.2mm	0.05mm* / 0.2mm	0.05mm* / 0.25mm	0.05mm	0.5mm (clearance)
>20 (2,900)	19.3 (2,800)	17.2 (2,495)	7.0 (1,015)	17.2 (2,490)
-54°C to +150°C	-54°C to +180°C	-54°C to +232°C	-54°C to +150°C	-54°C to +150°C
7471	7471	7649	7471/7649	7471
Press	Press	Press	Press	Press
50 ml bottle - 135516 250 ml bottle - 135517	50 ml bottle - 234950 250 ml bottle - 234952	50 ml bottle - 234776 250 ml bottle - 135515	250 ml bottle - 1381765	6 ml bottle - 473167 50 ml bottle - 473166



Recommended for high strength retaining of parts with a clearance or interference fit, e.g. retaining bushes, bearings, seals, fans and liners.



Gives best resistance to dynamic, axial and radial loads. Recommended for retaining shafts, gears, pulleys, and similar cylindrical parts.

Approvals

- Plumbing Safety License 4020:2002 Cert No. 8687 (Potable Water)



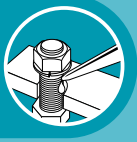
Recommended for high temperature retaining of parts with a clearance or interference fit, e.g. retaining bushes, bearings, seals, fans and liners.



Has lubricating properties to facilitate smooth assembly of heavy interference or high torque fits. Prevents galling and metal pick-up during assembly.



Used for repairing worn coaxial parts without re-machining. Enables reuse of worn bearing seats, keys, splines, tapers, or for retaining shims.



# ANTI-SEIZE LUBRICANTS

- » PROTECT AGAINST RUST, CORROSION, SEIZING AND GALLING
- » PROVIDE LUBRICATION IN EXTREME ENVIRONMENTS

## ► WHAT TYPE OF ANTI-SEIZE DO YOU REQUIRE?

	General Purpose		
MAXIMUM TEMPERATURE	870°C	982°C	1315°C
UNIQUE FEATURES	Graphite & Metallic Flake Fortified	Graphite & Copper Fortified	Graphite & Nickel Fortified
	High Lubricity	High Temperature Resistance	Extreme Chemical Resistance
► HENKEL SOLUTIONS	LOCTITE® Silver Grade Anti-Seize	LOCTITE® C5-A Copper Anti-Seize	LOCTITE® 771 Nickel Anti-Seize
Colour	Silver	Copper	Silver
Solid Lubricating Agent	Aluminium / Graphite	Copper / Graphite	Nickel / Graphite
Torque Coefficient (K value)*	0.18	0.16	0.13
Temperature Range	-29°C to 870°C	-29°C to 982°C	-29°C to 1315°C
Metal Free	No	No	No
Package Size & IDH	20 g stick - 944870 175 g aerosol - 471320 236 ml brushtop - 199012 250 g tube - 471321 500 g brushtop - 552091 5 kg bucket - 471322	453 g brushtop - 160796	500 g brushtop - 641488

\* Varies with substrate. For further information refer to product Technical data Sheet.

\* K value based on 3/8" nut and bolt in Skidmore-Wilhem apparatus and tested in a Wilhelm.



Heavy Duty, temperature resistant, petroleum based lubricant compound fortified with graphite and metal flake. Inert, will not evaporate or harden in extreme cold or heat. For use in assemblies up to 870°C. Recommended for:

- General purpose machine and bolt assembly.
- Close tolerance assembly
- Fine threads and snug slip fits.



Exclusive formula suspends copper and graphite in a high quality grease. Protects metal parts from rust, corrosion, galling and seizing at temperatures to 982°C. Recommended for:

- Nuts, bolts and studs.
- Fittings and shafts, machine surfaces.
- Fittings on steam turbines, pumps and valves.
- Flanges, extruders and dies.



Copper free formulation with extreme chemical resistance, recommended for stainless steel and other metal fittings. Prevents corrosion, seizing and galling in harsh chemical environments at temperatures to 1315°C. Recommended for:

- Chemical plants and oil refineries.
- Water and sewage plants.
- Environments where a 'clean' inert lubricant is needed.





Stainless Steel & Titanium Applications	Soft Metal Applications	Incidental Food Contact	Silicone Lubricant	Molybdenum-disulfide
1315°C	400°C	400°C	205°C	-29°C to 400°C (sliding) -29°C to 1315°C (anti-seize)
Metal Free	High Corrosion Resistance	Metal Free	Water & Steam Resistant	Heavy Duty
Extreme Temperature Resistance		NSF Approved	Electrical Resistance	Static load will not attract dirt or dust
<b>LOCTITE® Heavy Duty Anti-Seize</b>	<b>LOCTITE® Zinc Anti-Seize</b>	<b>LOCTITE® Food Grade Anti-Seize</b>	<b>LOCTITE® Silicone Lubricant</b>	<b>LOCTITE® Moly Dry Film</b>
Black	Dull Silver	White	Transparent Paste	Black
Calcium / Graphite	Zinc	Calcium	Silicone	Graphite
12.7mm steel bolts (Grade 8) and nuts (Grade 5)	0.15	-	-	0.06 – 0.12
-29°C to 1315°C	-29°C to 398°C	-29°C to 400°C	-29°C to 205°C	-29°C to 400°C (sliding) -29°C to 1315°C (anti-seize)
Yes	No	Yes	Yes	Yes
510 g brushtop - 209758	454 g brushtop - 233507	226 g brushtop - 1198200	150 g tube - 234317 290 g aerosol - 231009	340 g aerosol - 473134



Metal free formulation provides outstanding lubrication to all metals including stainless steel, aluminum and soft metals up to 1315°C. Recommended for:

- OEM specified turbine studs and bolts.
- Ethylene and acetylene piping.
- Petrochemical plants.
- Environments prohibiting the use of copper.



Smooth mixture of zinc dust and petrolatum grease that acts like an 'internal galvaniser' for superior protection of aluminum and ferrous surfaces from seizure and corrosion up to 400°C. Recommended for:

- Protecting aluminum, aluminum alloy, and ferrous metal from seizing and corrosion.



Metal free formulation provides high levels of purity and excellent lubricating properties for use on equipments with incidental food contact at temperatures up to 400°C. Recommended for:

- Lubricating and protecting parts in food processing plants, breweries, packaging plants and hospitals.



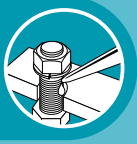
Non-curing silicone paste that seals, lubricates, protects, waterproofs, and electrically insulates metal, rubber, and plastic parts. Will not tarnish paint, rubber or plastic surfaces. Recommended for:

- Plug or ball valve, valve stem packing and protecting electrical contacts.
- Stopping leaks.



A molybdenum-disulfide based solid film lubricant. It is a heavy-duty lubricant used for general plant maintenance, metal working trade, machinery manufacturers and manufacturers of military and commercial jet engines. Recommended for:

- Maintenance.
- Production.
- Aerospace.
- Automotive, heavy equipment.
- Electrical.
- Petro chemical.



## ANTI-SEIZE LUBRICANTS

Loctite® brand Anti-Seize compounds are a range of premium quality products, developed to protect metal parts from corrosion, galling and seizing. They ease assembly and disassembly of slip fit and threaded joints, and reduce friction and wear. Formulated for severe environments, these products protect against high temperatures up to 1315°C, in conjunction with heavy loads and chemical corrosion.

### FEATURES & BENEFITS

**High Temperature Resistance** – Formulated with high quality grease and solid lubricating agents for optimal temperature resistance up to 1315°C.

**Reduces Friction & Wear** – Reduces metal-to-metal contact resulting in less friction and wear.

**Seals Against Corrosion** – Displaces and seals against contact with moisture and other corrosive liquids.

**Metal Free Available** – For use in environments that prohibit use of copper or where dissimilar metals are used.

**Convenient Packaging & Easy Use** – Available in tubs, tubes, aerosols and the patented stick applicator. Tubs include a brush attached to the lid for no-mess application.

### DID YOU KNOW?

#### Effective Anti-Seize lubricants increase assembly strength!

An anti-seize lubricant used on a bolt helps to develop greater clamp load for the same torque compared to an unlubricated bolt. However care should be taken to avoid over-stressing a bolt caused by excessive lubrication. Loctite® anti-seize products provide a controlled torque coefficient which ensures consistent clamp load when tightening.

#### Anti-Seize lubricants act as an 'Internal Galvaniser'!

The use of an anti-seize product is an excellent method of preventing galvanic corrosion, especially in hot, acidic, or caustic environments. Anti-seizes resist galvanic attack by sacrificing the metals in the anti-seize in preference to the metal parts under protection.

# INSTANT BONDING

WILL REQUIRE AN INSTANT ADHESIVE OPENING STATEMENT



## FEATURES & BENEFITS

- ✓ Convenient bonding in seconds
- ✓ High shear strength
- ✓ No mixing
- ✓ Bonds to a wide variety of materials
- ✓ Extensive range available, suitable for infinite industrial maintenance and OEM applications.

## PRODUCT DESCRIPTION

Henkel Corporation, the manufacturer of Loctite® products, is the world leader of structural and instant adhesive bonding solutions. Our advanced adhesives range includes Cyanoacrylates, Epoxies, Hot Melts, Light Cure, Silicones, Urethanes and Acrylics for maintenance and OEM applications.

The Loctite® adhesive products shown here is a targeted selection of maintenance bonding solutions. Call the Loctite® Customer Support Line for more information on our full product range.



# INSTANT BONDING

- » ASSEMBLE PARTS QUICKLY AND EASILY
- » REPAIR BROKEN PARTS
- » BOND DISSIMILAR MATERIALS

## ► WHAT ARE YOU BONDING?

	Plastics/Metals/Rubber	Difficult to bond surfaces	
DO YOU REQUIRE INSTANT ADHESION?	Yes		
IS THE SURFACE POROUS?	Non-Porous	Porous	
UNIQUE FEATURES	Instant Fixture	Instant Fixture	Instant Fixture
		Bonds Most Plastics	No Run Formula
► HENKEL SOLUTIONS	LOCTITE® 401	LOCTITE® 406	LOCTITE® 454
Colour	Clear	Clear	Clear
Gap Fill	0.05mm	0.05mm	0.10mm
Viscosity (CP)	90	20	Gel
Shear Strength* N/mm² (PSI)	20 (2,900)	15.5 (2,250)	20.9 (3,030)
Temperature Range	-54°C to +120°C	-54°C to +120°C	-54°C to +120°C
Fixture Time	5–20 sec	5–20 sec	30–60 sec
Full Strength	24 hrs	≥24 hrs	≥24 hrs
Recommended Primer	770	770	-
Package Size & IDH	3 g tube - 547691 25 ml bottle - 265607	25 ml bottle - 265606 100 ml bottle - 265619 500 ml bottle - 265621	3 g tube - 233998 20 g tube - 466862 200 g tube - 234004

\* Grit blasted mild steel cured for 24 hours at 22°C.



Designed for assembly of difficult-to-bond materials which require uniform stress distribution and strong tension and/or shear strength. Bonds a wide range of materials including metals, plastics and elastomers.



General purpose adhesive for difficult to bond surfaces. Bonds Santoprene® rubbers, polyolefin plastics and elastomers when used in conjunction with Loctite® 770 Polyolefin Primer.



General purpose gel for bonding metals, composite materials, wood, cork, foam, leather, card, paper, plaster and unglazed ceramics. Recommended for use on vertical or overhead surfaces. Fills gaps to 0.5mm with the use of Primer 7452.





Rubber/Metal		Plastics/Rubber		Plastics/Metals/Rubber		Plastics/Rubber	
No				Yes		No	
						Porous	
Non-Porous							
Rubber Toughened		Bonds to EPDM		Rubber Toughened		Low Odor	
Two-part Gap Fill							
High Peel Strength				High Peel Strength		Low Bloom	
LOCTITE® 480		LOCTITE® 424		LOCTITE® 435		LOCTITE® 460	
LOCTITE® 3090							
Black	Clear	Clear	Clear	Clear	Clear	Clear	Clear
0.05mm	0.05mm	0.05mm	0.05mm	0.05mm	0.05mm	0.05mm	5mm
150	110	175	40	21 (3,060)	21 (3,045)	21 (3,060)	21 (3,045)
26 (3,800)	22 (3,200)	19 (2,700)	21 (3,060)	21 (3,060)	21 (3,045)	21 (3,060)	21 (3,045)
-54°C to +100°C	-54°C to +80°C	-54°C to +100°C	-54°C to +100°C	-54°C to +100°C	-54°C to +100°C	-54°C to +100°C	-54°C to +80°C
60–120 sec	5–20 sec	30–60 sec	10–30 sec	10–30 sec	30–60 sec	10–30 sec	30–60 sec
≥24 hrs	≥24 hrs	≥24 hrs	≥24 hrs	≥24 hrs	≥24 hrs	≥24 hrs	≥24 hrs
770	770	770	770	770	770	770	770
20 g bottle - 1831562 500 ml bottle - 135253	25 ml bottle - 265609	25 ml bottle - 914156 500 ml bottle - 1055840	25 ml bottle - 473121 500 ml bottle - 937501	25 ml bottle - 473121 500 ml bottle - 937501	10 g dual syringe- 1796029	25 ml bottle - 473121 500 ml bottle - 937501	10 g dual syringe- 1796029



Black rubber toughened grade for bonding metal to metal and metal to rubber; especially suitable with applications where high peel strength is required and/or shock loads are present.



Excellent for bonding EPDM rubber. Loctite® 424 provides enhanced performance on EPDM and elastomers.



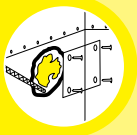
Rubber toughened adhesive with increased flexibility and peel strength along with enhanced resistance to shock. The product provides rapid bonding on a wide range of materials including metals, plastics and elastomers, as well as porous and absorbent materials like wood, leather and fabric.



Low odour and low blooming properties and is particularly suitable for applications where vapour control is difficult. This product provides rapid bonding of a wide range of materials including metals, plastics and elastomers. Loctite® 460 is particularly suited for bonding porous or absorbent materials such as wood, paper, leather and fabric.



Two component, fast curing, gap filling adhesive with excellent bonding characteristics to a variety of substrates including plastics, rubbers and metals. Loctite® 3090 is designed for the assembly of parts with varying or undefined band gaps. Loctite® 3090 is also suitable for bonding porous materials such as wood, paper, leather and fabric.



# STRUCTURAL BONDING

- » ELIMINATES OR SIGNIFICANTLY REDUCES COSTLY MECHANICAL FASTENING METHODS SUCH AS RIVETS, SCREWS AND WELDS
- » IDEAL FOR QUICK REPAIRS AND STRUCTURAL ASSEMBLIES
- » EXCELLENT RESISTANCE TO SEVERE ENVIRONMENTAL CONDITIONS
- » BONDS DISSIMILAR MATERIALS, SUCH AS METAL TO PLASTIC
- » FILLS LARGE GAPS BETWEEN PARTS

## ► WHAT ARE YOU BONDING?

UNIQUE FEATURES	General Purpose	
	Gap-fill (0.50mm)	Gap-fill (0.20mm)
	Non-Porous	Porous
	Allows Gap Fill	High Chemical Resistance
Multi-Purpose		

► HENKEL SOLUTIONS	LOCTITE® 330	LOCTITE® 3801
Colour	Amber	Amber
Gap Fill	0.50mm	0.20mm
Viscosity	Gel	Syrup
Shear Strength* N/mm² (PSI)	23 (3,300)	16 (2,300)
Temperature Range	-54°C to +120°C	-54°C to +82°C
Fixture Time	3-5 min	4-6 min
Full Strength	24 hrs	24 hrs
Recommended Activator/Primer	7387	-
Package Size & IDH	50 ml kit - 882799 300 ml cartridge - 929330	29.5 ml dual syringe - 168330

# Grit blasted steel cured for 24 hours at 22°C. \*Applied @ 22°C / 50% relative humidity. For further information refer to product Technical data Sheet.



This multi-purpose adhesive suits most bonding needs including metal bonding, ID plates and signage. Two part, no mix, fast curing and toughened with good moisture, impact resistance and peel strength. (50ml kit includes 7387 Activator 25gm).



Conventional dual syringe, two-part epoxy. Ideal for emergency repairs or where fast cure time is required. Sets in 5 minutes. Resistant to a wide range of chemicals and solvents, and acts as an excellent electrical insulator.



General Purpose
Gap-fill (0.20mm)
Non-Porous

High Temperature Resistance

Electrical Insulator

LOCTITE® 3805
Grey
0.20mm
Heavy Paste
21 (3,000)
-54°C to +150°C
10–15 min
16 hrs
-
56 g kit - 459312



Fast setting, two-component adhesive and filler system. Once mixed, the epoxy cures at room temperature, and forms a high strength, grey bondline. When fully cured, the epoxy is resistant to a wide range of chemicals and solvents, and acts as an excellent electrical insulator.

Metal
Gap-fill (0.50mm)
Non-Porous

Toughened

High Peel Strength

LOCTITE® 324
Yellow
0.50mm
Syrup
25 (3,300)
135°C
5–10 min
72 hrs
7075
50 ml bottle - 88478



Especially suitable for joining dissimilar materials eg. ferrite to plated materials in electric motors, loudspeakers etc. This product is specifically formulated for toughness and impact strength. Loctite® 324 cures when confined between close fitting parts with the aid of an activator.

Plastics/Metals
Gap-fill (0.25mm)
Non-Porous

Toughened

LOCTITE® E20HP

Off-white
0.25mm
Syrup
23 (3,300)
80°C
3 hrs
24 hrs
-
50 ml tube - 237107 400 ml cartridge - 237109



Toughened, medium-viscosity, industrial grade epoxy adhesive with a medium work life. Once mixed, the two-component epoxy cures at room temperature to form a tough, off-white, bondline that provides high peel resistance and high shear strengths. The fully cured epoxy is resistant to a wide range of chemicals and solvents, and acts as an excellent electrical insulator.



# PRIMERS & ACTIVATORS

- » ACTIVATES INACTIVE SURFACES AND SPEEDS CURE TIME
- » SPEEDS CURE THROUGH LARGER GAPS AND DEEP THREADS

▶ DO YOU NEED AN ACTIVATOR OR PRIMER?		
	Accelerate Cure or Promote Cure	
WHAT TYPE OF PRODUCT ARE YOU USING?	Anaerobic Threadlocking, Thread Sealing, Gasketing,	
WHICH PRODUCT ARE YOU USING?	222, 232, 243, 248, 268, 515, 518, 542, 561, 569, 609, 635, 660, 680	232, 248, 263, 268, 272, 277, 290, 510, 515, 518, 542, 561, 567, 569, 577, 620, 641
▶ HENKEL SOLUTIONS	LOCTITE® 7471	LOCTITE® 7649
Description	Activator	Activator
Base Solvent	Acetone / Isoproponal	Acetone
Drying Time at 20°C	30 to 70 secs	30 to 70 secs
On-Part Life	7 days	30 days
Package Size & IDH	133 ml aerosol - 1553340 3.78 ltr can - 990061	100 ml pump - 991076 3.78 ltr can - 990024

# Grit blasted steel cured for 24 hours at 22°C. \*Applied @ 22°C / 50% relative humidity. For further information refer to product Technical data Sheet.



FEATURES & BENEFITS	
✓ Activates inactive surfaces and speeds cure time	
✓ Speeds cure through larger gaps and deep threads	
<b>Metals</b>	
<b>Active Surfaces</b> Brass, copper, bronze, iron, (Activator optional)	soft steel
<b>Inactive Surface</b> Aluminium, stainless steel, (Activator required)	Aluminium, magnesium, zinc, black oxide, cadmium, titanium, nickel, others
	PE, PP, Acetyl

Use to increase the cure speed of Loctite® brand anaerobic products, especially at low temperatures, in applications with passive metals or inert surfaces, or where large gaps are involved.

Use to increase the cure speed of Loctite® brand anaerobic products, especially at low temperatures, in applications with passive metals or inert surfaces, or where large gaps are involved.





Activators  
in Large Gaps or at Low Temperature <5°C

Primer  
Improve adhesion to difficult to bond  
surfaces

Retaining

Cyanoacrylate Adhesive

324, 325

Post Cure Only  
(Refer to your Loctite® Sales  
Engineer for further details)

All Loctite® cyanoacrylate adhesives

LOCTITE® 7075

LOCTITE® 7452

LOCTITE® 770

Activator

Activator

Polyolefin Primer

Acetone

Acetone

Heptane

≥ 70 secs

30 secs

30 secs

120 mins

≤60 secs

8 hrs

100 ml pump pack - 990065

20 g aerosol - 471307  
946 ml can - 990062

100 ml pump - 990067  
946 ml can - 990068



Activate reaction of Loctite®324 or Loctite®  
325. No mixing required.



Apply post bonding applications to cure  
excess Loctite® brand cyanoacrylate  
adhesives. Typical applications include  
securing wires to coils or PCB's and  
tamperproofing adjustments and mounting  
edge guides or stiffeners.



Helps to provide strong reliable bonds  
with Loctite® brand cyanoacrylates on  
“impossible” substrates like polypropylene,  
polyethylene, PTFE and thermoplastic  
rubber.



# RUST TREATMENT & CLEANING

- » STABILIZE EXISTING RUST
- » GUARD AGAINST CORROSION
- » PREVENT ELECTROCHEMICAL CORROSION
- » INCREASE BELT FRICTION

## ► WHAT IS YOUR TASK?

	Releases Corroded & Rusted Parts	Lubricates & Protects	Gasket Removal
WHAT ARE YOU CLEANING?	-	-	-
UNIQUE FEATURES	Shock Freeze	Two spray options Prevents corrosion	Rapid Removal Minimises Flange Damage
► HENKEL SOLUTIONS	LOCTITE® Freeze & Release	LOCTITE® ML-11	LOCTITE® Chisel Paint Stripper
Appearance	Clear Liquid	Slightly Brown	White Liquid
Dry Time	-	-	-
Package Size & IDH	310 g aerosol - 1024403	360 ml aerosol - 1827849	510 m aerosol - 642664

Note: Varies with substrate. For further information refer to product Technical data Sheet.

## FEATURES & BENEFITS

- ✓ Effective rust converter formula for surface preparation of all metals
- ✓ Fast acting and noncorrosive gasket remover eliminates need for scraping and sanding
- ✓ Fast and effective industrial grade cleaners
- ✓ Premium-grade hand cleaner with skin conditioners to soothe and protect hands



Shock-freezes seized and rusted parts, causing microscopic cracks in the rust and allowing the lubricant to penetrate. The assembly can be easily dismantled after allowing 1-2 minutes and parts remain lubricated and protected from corrosion.  
Recommended for:

- Seized and or rusted components.



A light, semi-drying oil type spray that penetrates, lubricates, displaces water, cleans surfaces and provides protection to metal surfaces, to prevent corrosion.



Removes backed on gaskets from any type of assembly in 10 to 15 minutes. Prepares metal parts for new gaskets, eliminating scraping and sanding. Suitable for wood and is non-corrosive to aluminium. Not for use with plastics, linoleum or synthetic fibres.



Clean & Degrease	Clean & Degrease	Rust Treatment	Clean & Degrease		
Metal Parts	All Parts		Large Surfaces	Hands	Hands
Non-chlorinated	Non-Corrosive	Converts Rust	Biodegradable	Effective on all Stains	Pre-moistened waterless towels
	ODC Free	Protects Surface	Non-Toxic	Conditions Skin	Leaves no residues
		Up to 121°C	Non-Flammable	Orange Scented	Fortified with emollients and natural oils
Non-Chlorinated Parts Cleaner	LOCTITE® 7070	LOCTITE® Extend® Rust Treatment	LOCTITE® Natural Blue®	LOCTITE® Yuk-Off®	LOCTITE® Hand Wipes
Clear Liquid	Clear Liquid	Milky Liquid	Blue Liquid	White Lotion	Textured Towel
30 secs	5–20 mins	30 min	-	-	-
420 g aerosol - 1506652	473 g aerosol - 661976	946 ml bottle - 234981 3.78 ltr bottle - 160802	709 ml bottle - 235502 3.78 ltr bottle - 209804 18.9 ltr bucket - 235503	400 ml bottle - 366943 4 ltr pump - 367218 15 ltr bucket - 367217	75 pck tub - 337637 130 pk bucket - 337638

- Aggressively penetrates and dissolves
- Dries fast with no residue
- Eliminates the need to disassemble parts
- VOC compliant
- No chlorinated solvent run-off

Applications:  
Formulated to remove oil, grease, fluids, oxidised oils (gum) and asphalt from all types of metal parts.

General purpose parts cleaner and degreaser which contains no ozone depleting chemicals. Prepares surface for bonding and is non-corrosive and plastic compatible. Removes grease, oil and dirt from electrical parts, tools, bearings, controls, and precision equipment.

Converts existing rust into a stable base. Cured product acts as a primer ready for painting. Protects surfaces from corrosion. Use on metal pipes, valves, fittings, storage tanks, fences, guard rails, conveyors, construction and agricultural equipment.

A biodegradable, allpurpose, industrial strength, concentrated cleaner and degreaser, Natural Blue® contains no hazardous solvents. Formulated for wipe down, pressure spraying and immersion cleaning processes, Natural Blue® can be economically diluted with water at room temperature or heated, to meet a wide range of industrial cleaning applications. ODC free, non flammable, non-toxic and pine scented.  
(709ml is diluted 1:1 ready for use).

Contains premium-grade cleansing agents that quickly dissolve dirt, grease, resin, ink, paint, glue, tile cements and other stubborn stains. Citrusbased, smooth formula is pH balanced and fortified with skin conditioners lanolin, aloe vera, Vitamin E, jojoba and wheat germ extract to soothe and protect raw, rough hands.

Premoistened with a powerful cleaning formula, the abrasive, yet non-scratching fabric removes tar, grease, wax, ink, paint, lubricants and adhesives.



# SPECIALTY AND EMERGENCY REPAIR KITS

- » ENABLES RAPID REPAIR OF DAMAGED OR BURST PIPES
- » WILL SEAL LEAKS IN TANKS AND OTHER CONTAINMENT VESSELS IN ADDITION TO REPAIRING METAL PARTS
- » INCLUDES A KIT FOR REPAIRING OR REPLACING DAMAGED O-RING SEALS

## ► INDUSTRIAL MAINTENANCE KITS

	20 x Products	13 x Products	
<b>EMERGENCY REPAIR KITS</b>			<b>Replace or Repair O-Ring Seals</b>
<b>FEATURES &amp; BENEFITS</b>	<b>Comprehensive</b>	<b>Loctite® Core Products</b>	<b>Water &amp; Oil Resistant</b>
	<b>Free Tool Box</b>	<b>Free Tool Box</b>	<b>Permanent Replacement</b>
<b>► HENKEL SOLUTIONS</b>	<b>Top Line Kit</b>	<b>MRO Kit</b>	<b>O-Ring Kit</b>
<b>Kits contents</b>	Threadlockers - 243, 263, 290 50ml Retaining Compounds - 609, 641, 660, 680 50ml Thread Sealants - 515, 567, 569 50ml Bonding Adhesives - 406 25ml, 454 20g, 3805 56g Anti-Seize Lubricants - Silver Grade, 771 Nickel 500g Primers - 7471 127g, 7649 100ml Others - 790 Chisel® Paint Stripper 510g Metal Magic Repair 113g	Threadlockers - 243, 263 50ml Retaining Compound - 609, 660 50ml Gaskets - 515, 587 50ml Bonding Adhesives - 401 25ml Thread Sealants - 567, 569 50ml Anti-Seize Lubricants - Silver Grade stick 20g Primer - 7649 133ml Others - ML-11 360ml Metal Magic Repair 113g Loctite® 7414 - 50ml	406 Instant Adhesive O-Ring Splicing Fixture Cutting Blade 1.6mm, 2.4mm, 3.0mm, 5.7mm, 8.4mm Cord (Metric Kit) or Loctite® Clean-up Solvent Loctite® Waterproofing Solution 3/32", 1/8", 3/16", 1/4" Cord (Imperial Kit)
<b>Package Size &amp; IDH</b>	Kit - 496749	Kit - 1575818	Metric - 473153 Imperial - 473154



## FEATURES & BENEFITS

### Tool Kits

- ✓ Contains essential tools for industrial maintenance and repair

### Emergency Repair Products





- ✓ Easy to use – does not require specialised equipment
- ✓ Enable rapid repair of damaged equipment

Contain all the essential tools for industrial maintenance reliability including Threadlocking, Retaining Compounds, Thread Sealing, Bonding Adhesives, Anti-Seize Lubricants and Primers.

Packaged in an easy-to-carry, rugged and lockable toolbox. The kit conveniently packages an assortment of popular Loctite® solutions for every MRO need.

Contains all of the materials necessary to produce stationary o-rings on the spot. Saves time by allowing o-ring replacement without disassembling machinery. Eliminates the need for inventory of different sized o-rings.



Stop Pipe Leaks	Repair Metal Surfaces	Tamper proofing	
30 Minute Cure	10 Minute Cure		
Cures Wet or Underwater	Metal-Like Finish		
Pipe Repair	Metal Magic	LOCTITE® 7414	LOCTITE® Insulating & Sealing Wrap
Urethane-impregnated Fiberglass Tape Metal Magic Steel Stick Protective Gloves	Putty stick (pre-measured resin & hardener. Simply cut off desired amount, knead and apply)	Solvent paste adhesive	Self fusing silicone tape
50mm x 1.8m kit - 473162	113 g stick - 645440	50 ml tube - 1606544	3.05 m roll - 1540599
			
Recommended for reliable, temporary repairs of metal, plastic and composite pipes. Easy to use - no tools are required and can be applied to odd shapes as required. Cures in 30 minutes and can be sanded or painted.	Easy to use, steel-filled compound designed for emergency maintenance repairs on damp, dry or underwater surfaces. Cures to a metal-like finish in less than 10 minutes under typical temperatures of -30°C to +121°C	Loctite® 7414 is a fast drying paste to be used in production to visually detect any movement in the adjustment of parts. Loctite® 7414 has been developed for use on compression fittings, studs, nuts, parts and assemblies after they have been set to proper tension or position.	Self-fusing, silicone rubber wrap that is recommended for reliable, temporary repairs on a variety of substrates. Typical applications includes flexible hose repair, pipe repair, tool handle wrap, and electrical insulative wrap.





## TECHNICAL REFERENCES

### Ten Points About Liquid Threadlockers

BY RICK SKIBBA  
HENKEL CORPORATION, ROCKY HILL, CT

Bolts, studs, set screws and other threaded fasteners are the “ties that bond” industrial equipment together. Considering that fastener loosening is a leading cause of catastrophic failure in machinery, maintaining proper clamping forces is an important element in fastening effectiveness.

Liquid anaerobic threadlockers are an excellent method of keeping fasteners firmly in place. Listed here are ten points that plant personnel should know about using liquid anaerobic threadlockers:

**It's not just a bolt.** The real function of nuts and bolts is to provide clamping force to hold two components together. If that clamping force decreases, the fastener begins to slip, and failure becomes inevitable.

**Thread space is the enemy.** There can be as little as 15% metal-to-metal contact between the thread of a nut and bolt. The empty space leaves room for movement that leads to self-loosening and loss of clamping force.

**Side movement causes failure.** Fasteners work loose for complex reasons, but a key cause is sideways movement. Bolted surfaces can slide sideways as a result of thermal expansion, bending of the assembly, impact or vibration. As this happens, the bolt takes on a rocking motion that causes the threads to wear against each other. In time, the bolt becomes almost frictionless, and the threads can unwind.

**Threadlockers stop all kinds of movement.** Liquid anaerobic threadlockers attack the root cause of loosening by filling spaces between the threads. The result is a secure, one-piece assembly that will not loosen under stress.

**Sealing stops corrosion.** By sealing between thread spaces, threadlockers keep out air and moisture that can cause corrosion – another common cause of fastener failure. Because of their chemical resistance, threadlockers seal effectively in contact with most fluids, gases, and solvents used in industry.

(Refer to Fluid Compatibility Chart - pg 34-35).

**Threadlockers hold better.** In test on transverse shock and vibration machines, liquid threadlockers drastically outperformed mechanical devices (see graph). Bolts secured with threadlocker retained nearly all their clamping force after more than 1,000 cycles. Mechanical devices began to fail almost immediately.

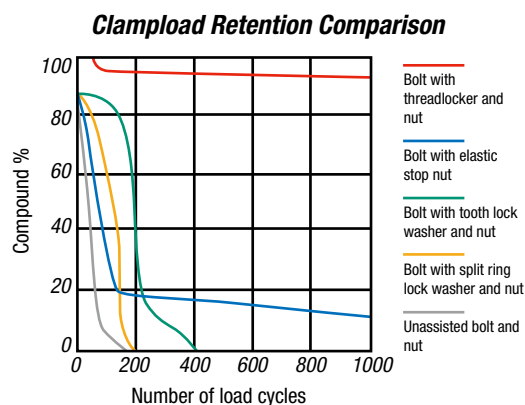
**Better performance cost less.** Mechanical locking methods are effective to some degree, but are difficult to justify based on cost. A special nut or washer can cost more than four times as much as an application of liquid threadlocker. Mechanical devices also require extensive and costly inventories to keep the range of sizes on hand. Three or four grades of threadlocker – easy to carry and colour-coded, serve the same purpose.

**It will come out.** All threadlocked fasteners can be disassembled. Different grades of threadlockers can be used depending on the job. Fasteners secured with low and medium strength grades can be removed with common hand tools. Those secured with high strength grades can be removed by applying heat for a specified time.

**Threadlockers ease assembly and disassembly.** The thixotropic property of Loctite® anaerobics is conducive when applied to threads of fasteners and fittings: they become less viscous when put under stress (being shaken, stirred or dispensed) and return to their original state when stress is removed.

When wet, threadlockers lubricate fasteners, allowing proper, consistent assembly tightening and torque. When cured in place, threadlockers stop corrosion, thus preventing seizure and allowing for ease in disassembly.

**There is no “downside”.** Liquid threadlockers are not just for certain specialized uses. They perform effectively on fasteners and threaded assemblies of any type and size, in any kind of equipment.



*In test on transverse shock and vibration machines, liquid threadlockers drastically outperformed mechanical locking devices*

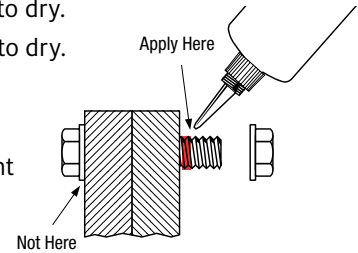
# APPLICATION PROCEDURES

## Threadlocking



### ► THROUGH HOLE (BOLTS AND NUTS)

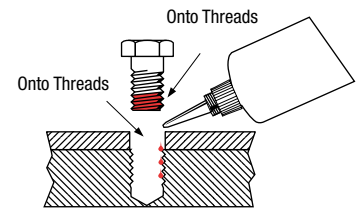
1. Clean all threads (bolt and nut) with Loctite® ODC-Free Cleaner & Degreaser. Allow to dry.
2. If necessary, spray all threads with Loctite® Primer (Refer to Technical Data). Allow to dry.
3. Select the proper strength Loctite® Threadlocker product.
4. Insert bolt into through hole assembly.
5. Apply several drops of Threadlocker onto bolt at targeted tightened nut engagement area. Avoid touching bottle tip to metal.
6. Assemble and tighten nut as usual.



### ► BLIND HOLES (CAP SCREWS, ETC.)

1. Clean all threads (bolt and hole) with Loctite® ODC-Free Cleaner & Degreaser. Allow to dry.
2. If necessary, spray (bolt and hole) with Primer (Refer to Technical data). Allow to dry.
3. Select the proper strength Threadlocking product.
4. Squirt several drops down the sides of the female threads.
5. Apply several drops to bolt. Avoid touching bottle tip to metal.
6. Tighten as usual.

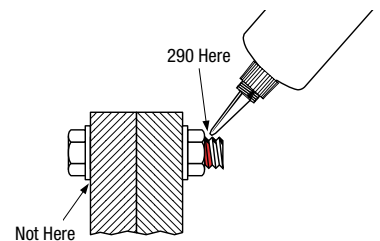
**Note:** Using Loctite® Threadlockers will virtually eliminate stripped threads in aluminium or magnesium housings caused by galvanic corrosion.



### ► PRE-ASSEMBLED FASTENERS

1. Clean bolts and nuts with Loctite® ODC-Free Cleaner & Degreaser.
2. Assemble components.
3. Tighten nuts.
4. Apply drops of Loctite® 290 Threadlocker at the nut and bolt juncture.
5. Avoid touching bottle tip to metal.

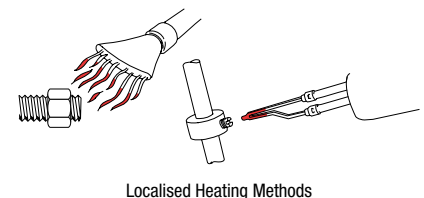
**Note:** For preventive maintenance on existing equipment: RETIGHTEN nuts and apply Loctite® 290 Threadlocker at the nut and bolt juncture.



### ► HIGH STRENGTH DISASSEMBLY

1. Apply localised heat to nut or stud (260°C for 5 minutes).
2. Disassemble while HOT.

**Note:** Use standard hand tools for disassembly of low and medium strength Threadlockers.





## APPLICATION PROCEDURES

### Thread Sealing

#### ► STANDARD FITTINGS — PIPE, HYDRAULICS, POTABLE WATER OR AIR

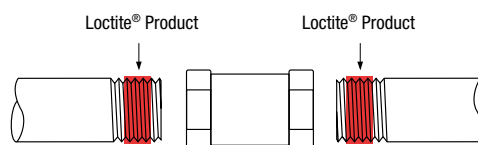
1. Clean parts of contamination with ODC-Free Cleaner & Degreaser. If necessary, spray Loctite® Primer (Refer to Technical Data) onto threaded parts (male and female). Allow to dry. Note: Primer is not required for brass parts.
2. Apply a band of Loctite Product to male threads starting one to two threads from end of pipe.
3. Assemble parts snugly. Do not overtighten.
4. If initial pressure exceeds 6.9 MPa\*, wait 30 minutes before pressurizing.

**Note:** • If sealing chemicals or strong acids/bases, refer to Fluid Compatibility Chart (pg 34-35).

• Do not use on oxygen or strong oxidisers (chlorine).

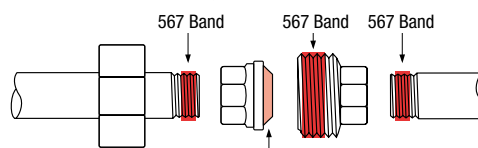
• Refer to Loctite® Thread Sealing selector Chart (pg 8-9) for correct product selection

\*Depending on conditions



#### ► METAL PIPE UNIONS

1. Disassemble and if necessary, spray all components with Loctite® 7649 Primer. Allow to dry.
2. Apply a thin coating of 567 PST® Pipe Sealant to union face.
3. Apply a band of 567 PST® Pipe Sealant to male threads.
4. Assemble parts snugly.



## Shaft Mounted Components

#### ► SLIP FIT — LIGHT DUTY

##### ORIGINAL

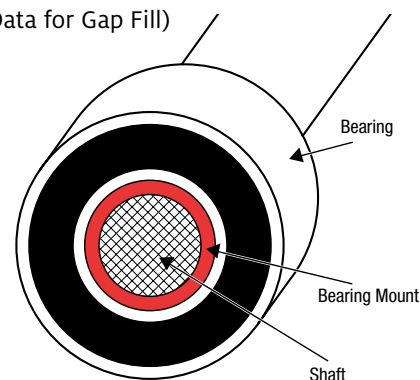
1. Clean all parts with Loctite® ODC-Free Cleaner & Degreaser.
2. Spray all parts (I.D. and O.D.) with Loctite® Primer (Refer Technical Data).
3. Apply Loctite® 641 dabs around shaft at engagement area. (Refer to Technical Data for Gap Fill)
4. Assemble parts as normal.
5. Wipe off excess.
6. Allow 20 minutes cure time prior to service.

##### WORN SHAFT

Follow directions above except:

1. Determine radial gap.
2. If radial gap exceeds 0.1mm, Loctite® Primer must be used.
3. Take steps to maintain concentricity with large gaps.
4. Larger gaps require longer cure times (30-60 minutes).
5. Loctite® Quick Metal® 660 is NOT recommended for radial gaps exceeding 0.5mm.

**Note:** Loctite® Quick Metal® 660 is very fast fixturing (30 seconds or less) with Loctite® 7471 Primer (T).



# APPLICATION PROCEDURES

## Formed-in-place Gasketing

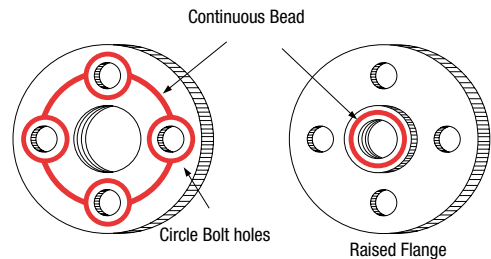


### ► SEALING CAST RIGID FLANGES

1. Remove old gasketing material and other heavy contaminants with Loctite® Chisel® Gasket Remover. use mechanical removal technique if required.

**Note:** Avoid grinding.

2. Clean both flanges with Loctite® ODC-Free Cleaner & Degreaser.
3. Spray Loctite® Primer (Refer Technical data) on only one surface. Allow to dry.
4. Apply a continuous bead of SELECTED LOCTITE® GASKETING PRODUCT to the other surface. **Note:** Circle all bolt holes with sealant, if appropriate.
5. Mate Parts. Assemble and tighten as required. **Note:** Immediate assembly not required; however avoid delays over 45 minutes (assemble immediately if primer is used).
6. Allow to cure:
  - a. No pressure – immediate service
  - b. Low pressure (up to 3.45mPa) – 30 to 45 minutes
  - c. High pressure (3.45 to 17.2mPa) – 4 hours
  - d. Extreme high pressure (17.2 to 34.45mPa) – 24 hours

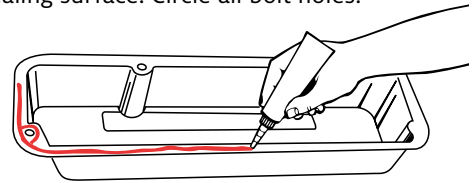


### ► STAMPED OR SHEET METAL FLANGES

1. Remove old gasketing material and other heavy contaminants with Loctite® Chisel® Gasket Remover.
2. Clean both flanges with Loctite® ODC-Free Cleaner & Degreaser.
3. Apply a continuous bead of the selected Loctite® MAXX® SILICONE to sealing surface. Circle all bolt holes.
 

**Note:**

  - Use proper bead diameter to seal flange width and depth.
  - Minimize excessive material “squeeze in”.
4. Assemble within 10 minutes by pressing together. Tighten as required.
5. Clean up any excess.
6. Cure times will vary with temperature, humidity, and gap. Typical full cure time is 24 hours



### ► REFER TO LOCTITE® DO IT RIGHT USERS GUIDE FOR FURTHER APPLICATION PROCEDURES SUCH AS;

#### Threadlocking

- Blind Holes (Studs, etc)
- Adjustment Screws
- Stripped Thread Repair

#### Thread Sealing

- Compression Fittings
- Flared / Swaged Fittings
- Hose Ends – Air & Hydraulic

#### Puncture Sealing

- Tanks, Vessels, etc

#### Porosity Sealing

- Porosity in Welds and Castings

#### Gasket dressing

- Sealing Flanges with Gasket

#### Strengthen Keyed Assemblies

- Keyed Assemblies – Standard & Heavy Duty
- Repair Badly Wallowed Keys

#### Shaft Mounted Components

- Repair Badly Worn Shaft
- Slip Fit – Heavy Duty
- Press Fit

#### Housed Components

- Slip Fit – Light & Heavy Duty
- Retaining (Large Gaps)

#### And More....



# FLUID COMPATABILITY CHART

## LIQUIDS, SOLUTIONS & SUSPENSIONS

(FOR METAL THREADED FITTINGS SEALED WITH LOCTITE® SEALANTS)

### LEGEND:

● All Loctite® Anaerobic Sealants are Compatible Including # 243, 542, 567, 569, 577

† Use Loctite® 277

✱ Not Recommended

□ < 10% (same as ●)

> 10% (same as †)

☆ < 5% (same as ●)

> 5% (same as †)

◆ Use Loctite® # 243, 290

Abrasive Coolant	●	Aromatic Gasoline	●	Arochlor \$	●	Cement Slurry	●	Gum Paste	●	Maleic Acid	●
Acetaldehyde	●	Aromatic Solvents	●	Ceric Oxide	●	Ceramic Enamel	●	Gum Turpentine	●	Maleic Anhydride	●
Acetate Solvents	●	Arsenic Acid	●	Chalk	●	Emulsified Oils	●	Gypsum	●	Manganese Chloride	●
Acetamide	●	Asbestos Slurry	●	Chemical Pulp	●	Enamel Frit Slip	●		●	Manganese Sulfate	●
Acetic Acid	●	Ash Slurry	●	Chestnut Tanning	●	Esters General	●	Halane Sol	●	Melamine Resin	●
Acetic Acid - glacial	□	Asphalt Emulsions	●	China Clay	●	Ethyl Acetate	●	Halogen Tin Plating	●	Menthol	●
Acetic Anhydride	●	Asphalt Molten	●	Chloral Alcoholate	●	Ethyl Alcohol	●	Halowax \$	●	Mercaptans	●
Acetone	●		●	Chloramine	●	Ethyl Amine	●	Harvel-Trans Oil	●	Mercuric Chloride	●
Acetyl Chloride	●	Bagasse Fibers	●	Chlorinated Hydrocarbons	●	Ethyl Bromide	●	Heptane	●	Mercuric Nitrate	●
Acetylene (Liquid Phase)	●	Barium Acetate	●	Chlorinated Paperstock	●	Ethyl Cellosolve \$	●	Hexachlorobenzene	●	Mercury	●
Acid Clay	●	Barium Chloride	●	Chlorinated Solvents	●	Ethyl Cellosolve Slurry \$	●	Hexadiene	●	Mercury Dry	●
Acrylic Acid	●	Barium Hydroxide	●	Chlorinated Sulphuric Acids	✱	Ethyl Formate	●	Hexamethylene Tetramine	●	Methane	●
Acrylonitrile	●	Barium Sulfate	●	Chlorine Dioxide	✱	Ethyl Silicate	●	Hexane	●	Methyl Alcohol	●
Activated Alumina	●	Bentonite	●	Chlorine Liquid	□	Ethylene Diamine	●	Hydrazine	●	Methyl Acetate	●
Activated Carbon	●	Benzaldehyde	●	Chlorine (Dry)	●	Ethylene Dibromide	●	Hydrazine Hydrate	●	Methyl Bromide	●
Activated Silica	●	Benzene	●	Chloroacetic Acid	●	Ethylene Dichloride	●	Hydrobromic Acid	●	□ Methyl Carbitol	●
Alcohol-Allyl	●	Benzene Hexachloride	●	Chlorobenzene (Dry)	●	Ethylene Glycol	●	Hydrochloric Acid	●	● Methyl Cellosolve \$	●
Alcohol-Amyl	●	Benzene in Hydrochloric Acid	●	Chloroform (Dry)	●	Ethylenediamine Tetramine	●	Hydrocyanic Acid	□	□ Methyl Chloride	●
Alcohol-Benzyl	●	Borax \$ Liquors	●	Chloroform Methyl	●		●	Hydrofluoric Acid	●	● Methyl Ethyl Ketone	●
Alcohol-Butyl	●	Boric Acid	●	Chlorosulfonic Acid	●	Fatty Acids	●	Hydrogen Peroxide (dil)	●	● Methyl Isobutyl Ketone	●
Alcohol-Ethyl	●	Brake Fluids	●	Chromic Acid 10%	●	✱ Fatty Acids Amine	●	Hydrogen Peroxide (con)	†	● Methyl Lactate	●
Alcohol-Furfuryl	●	Brine Chlorinated	●	Chromic Acid 50% (cold)	●	✱ Fatty Alcohol	●	Hydroquinone	●	● Methyl Orange	●
Alcohol-Hexyl	●	Brine (cold)	●	Chromic Acid 50% (hot)	●	□ Ferric-Floc	●	Hydroxyacetic Acid	●	● Methylamine	●
Alcohol-Isopropyl	●	Bromine Solution	†	Chromium Acetate	●	□ Ferric Chloride	●	Hypo	●	● Methylene Chloride	●
Alcohol-Methyl	●	Bleached Pulps	●	Chromium Chloride	●	□ Ferric Nitrate	●	Hypochlorous Acid	●	● Mineral Spirits	●
Alcohol-Propyl	●	Butadiene	●	Chromium Sulfate	●	● Ferric Sulfate	●		●	● Mixed Acid, Nitric/Sulfuric	✱
Alum-Ammonium	●	Butyl Acetate	●	Classified	●	✱ Ferrocene-Oil Sol	●		●	● Monochloroacetic Acid	●
Alum-Chrome	●	Butyl Alcohol	●	Clay	●	● Ferrous Chloride	●	Ink	●	● Morpholine	●
Alum-Potassium	●	Butyl Amine	●	Coal Slurry	●	● Ferrous Oxalate	●	Ink in Solvent-Printing	●	● Mud	●
Alum-Sodium	●	Butyl Cellulosolve \$	●	Coal Tar	●	● Ferrous Sulfate 10%	●	Iodine in Alcohol	●		●
Alumina	●	Butyl Chloride	●	Cobalt Chloride	●	● Ferrous Sulfate (Sat)	●	Iodine-Potassium Iodide	●	● Nalco Sol.	●
Aluminium Acetate	●	Butyl Ether (Dry)	●	Copper Ammonium Formate	●	● Fertilizer Sol	●	Iodine Solutions	●	● Naphtha	●
Aluminium Bicarbonate	●	Butyl Lactate	●	Copper Chloride	●	● Flotation Concentrates	●	Ion Exchange Service	●	● Naphthalene	●
Aluminium Bifluoride	●	Butyl Resin	●	Copper Cyanide	●	● Fluoride Salts	●	Ion Exclusion Glycol	●	● Naval Stores Solvent	●
Aluminium Chloride	●	Butyraldehyde	●	Copper Liquor	●	● Fluorine, Gaseous or Liquid	●	Irish Moss Slurry	●	● Neomacrotide	●
Aluminium Sulfate	●	Butyric Acid	●	Copper Naphthenate	●	● Fluorolube	●	Iron Ore Taconite	●	● Neoprene Emulsion	●
Ammonia Anhydrous	✱	Cadmium Chloride	●	Copper Plating (Acid Process)	●	● Flux Silic Acid	●	Iron Oxide	●	● Neoprene Latex	●
Ammonia Solutions	✱	Cadmium Plating Bath	●	Copper Plating (Alk. Process)	●	● Flux Soldering	●	Isobutyl Alcohol	●	● Nickel Acetate	●
Ammonium Bisulfite	●	Calcium Acetate	●	Copper Sulfate	●	● Fly Ash Dry	●	Isobutyraldehyde	●	● Nickel Ammonium Sulfate	●
Ammonium Borate	●	Calcium Bisulfate	●	Core Oil	●	● Foam Latex Mix	●	Isocetane	●	● Nickel Chloride	●
Ammonium Bromide	●	Calcium Carbonate	●	Corundum	●	● Foamate	●	Isopropyl Alcohol	●	● Nickel Cyanide	●
Ammonium Carbonate	●	Calcium Chlorate	●	Cresosote	●	● Formaldehyde (cold)	●	Isocyanate Resin	●	● Nickel Fluoborate	●
Ammonium Chloride	●	Calcium Chloride	●	Cresosote-Cresylic Acid	●	● Formaldehyde (hot)	●	Isopropyl Acetate	●	● Nickel Ore Fines	●
Ammonium Chromate	●	Calcium Citrate	●	Cyanoacetic Acid	●	● Formic Acid (Dil cold)	●	Isopropyl Ether	●	● Nickel Plating Bright	●
Ammonium Fluoride	●	Calcium Citrate	●	Cyanoacetic Acid	●	● Formic Acid (Dil hot)	●	Itaconic Acid	●	● Nickel Sulfate	●
Ammonium Fluorosilicate	●	Calcium Ferrocyanide	●	Cyanoacetic Acid	●	● Formic Acid (cold)	●		●	● Nicotinic Acid	□
Ammonium Formate	●	Calcium Hydroxide	●	Cyanoacetic Acid	●	● Formic Acid (hot)	●	Jet Fuels	●	● Nitrate Sol.	●
Ammonium Hydroxide	✱	Calcium Lactate	●	Cyanoacetic Acid	●	● Freon \$	●	Jeweler's Rouge	●	● Nitration Acid(s)	✱
Ammonium Hyposulfite	●	Calcium Nitrate	●	Cyanoacetic Acid	●	● Fuel Oil	●	Jig Table Slurry	●	● Nitric Acid	✱
Ammonium Iodide	●	Calcium Phosphate	●	Cyanoacetic Acid	●	● Fuming Nitric Red	✱		●	● Nitric Acid 10%	□
Ammonium Molybdate	●	Calcium Silicate	●	Cyanoacetic Acid	●	● Fuming Sulfuric	✱	Kaolin-China Clay \$	●	● Nitric Acid 20%	†
Ammonium Nitrate	●	Calcium Sulfamate	●	Cyanoacetic Acid	●	● Fuming Oleum	✱	Kelp Slurry	●	● Nitric Acid Anhydrous	✱
Ammonium Oxalate	●	Calcium Sulfate	●	Cyanoacetic Acid	●	● Furfural	●	Kerosene	●	● Nitric Acid Fuming	✱
Ammonium Persulfate	●	Calcium Sulfite	●	Cyanoacetic Acid	●		●	Kerosene Chlorinated	●	● Nitro Aryl Sulfonic Acid	●
Ammonium Phosphate	●	Camphor	●	Cyanoacetic Acid	●		●		●	● Nitrobenzene-Dry	●
Ammonium Picrate	●	Carbitol	●	Cyanoacetic Acid	●		●		●	● Nitrocellulose	●
Ammonium Sulfate	●	Carbolic Acid (phenol)	●	Cyanoacetic Acid	●		●		●	● Nitrofurane	●
Ammonium Sulfate Scrubber	●	Carbon Bisulfide	●	Cyanoacetic Acid	●		●		●	● Nitroguanidine	●
Ammonium Sulfide	●	Carbon Black	●	Cyanoacetic Acid	●		●		●	● Nitroparaffins-Dry	●
Ammonium Thiocyanate	●	Carbon Tetrachloride	●	Cyanoacetic Acid	●		●		●	● Nitrosyl Chloride	●
Amyl Acetate	●	Carbonic Acid	□	Cyanoacetic Acid	●		●		●	● Norite Carbon	●
Amyl Amine	●	Carbowax \$	●	Cyanoacetic Acid	●		●		●	● Nuchar	●
Amyl Chloride	●	Carboxymethyl Cellulose	●	Cyanoacetic Acid	●		●		●		●
Aniline	●	Carnauba Wax	●	Cyanoacetic Acid	●		●		●		●
Aniline Dyes	●	Casein	●	Cyanoacetic Acid	●		●		●		●
Anodizing Bath	●	Casein Water Paint	●	Cyanoacetic Acid	●		●		●		●
Antichlor Solution	●	Celite	●	Cyanoacetic Acid	●		●		●		●
Antimony Acid Salts	●	Cellosolve \$	●	Cyanoacetic Acid	●		●		●		●
Antimony Oxide	●	Cellulose Pulp	●	Cyanoacetic Acid	●		●		●		●
Antioxidant Gasoline	●	Cellulose Xanthate	●	Cyanoacetic Acid	●		●		●		●
Aqua Regia	✱	Cement Dry/Air Blown	●	Cyanoacetic Acid	●		●		●		●
Argon	●	Cement Grout	●	Cyanoacetic Acid	●		●		●		●
Armeen \$	●		●	Cyanoacetic Acid	●		●		●		●



# FLUID COMPATABILITY CHART



## LIQUIDS, SOLUTIONS & SUSPENSIONS

(FOR METAL THREADED FITTINGS SEALED WITH LOCTITE® SEALANTS)

Paper Pulp with Dye .....	● Potassium Acetate .....	● Silver Nitrate .....	● Starch Base .....	● Tricresyl Phosphate .....	● Acetylene .....
Paper Pulp, bleached .....	● Potassium Alum. Sulfate .....	● Size Emulsion .....	● Stearic Acid .....	● Triethanolamine .....	● Acid & Alkali Vapors .....
Paper Pulp, bleached-washed .....	● Potassium Bromide .....	● Skelly Solve E, L .....	● Steep Water .....	● Triethylene Glycol .....	● Air .....
Paper Pulp Chlorinated .....	● Potassium Carbonate .....	● Slate to 400 Mesh .....	● Sterilization Steam .....	● Trioxane .....	● Amine .....
Paper Groundwood .....	● Potassium Chlorate .....	● Soap Lye .....	● Stillage Distillers .....	● Tungstic Acid .....	● Ammonia .....
Paper Rag .....	● Potassium Chloride Sol. ....	● Soap Solutions (Stearates) .....	● Stoddard Solvent .....	● Turpentine .....	
Paper Stocks, Fine .....	● Potassium Chromate .....	● Soap Stone Air Blown .....	● Styrene .....		● Butane .....
Paradichlorobenzene .....	● Potassium Cyanide Sol. ....	● Soda Pulp .....	● Styrene Butadiene Latex .....	● UCON § Lube .....	● Butadiene Gas/Liquid .....
Paraffin Molten .....	● Potassium Dichromate .....	● Sodium Acetate .....	● Sulfamic Acid .....	● Udyllite Bath-Nickel .....	● Butylene Gas/Liquid .....
Paraffin Oil .....	● Potassium Ferricyanide .....	● Sodium Acid Fluoride .....	● Sulfan-Sulfuric Anhydride .....	● Undecylenic Acid .....	● By-Product Gas (Dry) .....
Paraformaldehyde .....	● Potassium Hydroxide .....	● Sodium Aluminate .....	● Sulfathiazole .....	● Unichrome Sol. Alk. ....	
Pectin Solution Acid .....	● Potassium Iodide .....	● Sodium Arsenate .....	● Sulfite Liquor .....	● Uranium Salts .....	● Carbon Dioxide .....
Pentachlorethane .....	● Potassium Nitrate .....	● Sodium Benzene Sulfonate .....	● Sulfite Stock .....	● Uranyl Nitrate .....	● Carbon Disulfide .....
Pentaerythritol Sol. ....	● Potassium Perchlorate .....	● Sodium Bichromate .....	● Sulfonated Oils .....	● Uranyl Sulfate .....	● Carbon Monoxide .....
Perchlorethylene (Dry) .....	● Potassium Permanganate .....	● Sodium Bisulfite .....	● Sulfones .....	● Urea Ammonia Liquor .....	● Chloride (Dry) .....
Perchloric Acid .....	□ Potassium Persulfate .....	● Sodium Bromide .....	● Sulfonic Acids .....		● Chlorine (Wet) .....
Perchloromethyl Mercaptan .....	● Potassium Phosphate .....	● Sodium Carbonate .....	● Sulfonyl Chloride .....	● Vacuum to 100 Micron .....	● Chlorine (Dry) .....
Permanganic Acid .....	● Potassium Silicate .....	● Sodium Chlorate .....	● Sulfur Slurry .....	● Vacuum below 100 Micron .....	● Coke-Oven Gas (Cold) .....
Persulfuric Acid .....	● Potassium Sulfate .....	● Sodium Chlorite .....	● Sulfur Solution .....	● Vacuum Oil .....	● Coke-Oven Gas (Hot) .....
Petroleum Ether .....	● Potassium Xanthate .....	● Sodium Cyanide .....	● Sulfur in Carbon Disulfide .....	● Vanadium Pentoxide .....	● Cyanogen Chloride .....
Petroleum Jelly .....	● Press Board Waste .....	● Sodium Ferricyanide .....	● Sulphuric Acid 0-7% .....	↑ Slurry .....	● Cyanogen Gas .....
Phenol Formaldehyde Resins .....	● Propionic Acid .....	● Sodium Formate .....	● Sulphuric Acid 7-40% .....	↑ Varnish .....	
Phenol Sulfonic Acid .....	● Propyl Alcohol .....	● Sodium Glutamate .....	● Sulphuric Acid 40-75% .....	↑ Versol-Naphtha Solv. ....	● Ethane .....
Phenolic Glue .....	● Propyl Bromide .....	● Sodium Hydrogen Sulfate .....	● Sulphuric Acid 75-95% .....	● Versene § .....	● Ether-see Diethyl Ether .....
Phloroglucinol .....	● Propylene Glycol .....	● Sodium Hydrosulfite .....	● Sulphuric Acid 95-100% .....	● Vinyl Acetate Dry or .....	● Ethylene .....
Phosphate Ester .....	● Pumice .....	● Sodium Hydrosulfide .....	● Sulphurous Acid .....	↑ Chloride Monomer .....	● Ethylene Oxide .....
Phosphatic Sand .....	● Pyranol .....	● Sodium Hydrochloride .....	● Sulfuryl Chloride .....	● Vinyl Chloride Latex Emul. ....	
Phosphoric Acid 85% (hot) .....	● Pyridine .....	● Sodium Hydroxide .....	● Surfactants .....	● Vinyl Resin Slurry .....	● Freon § (11-12-21-22) .....
Phosphoric Acid 85% (cold) .....	● Pyrogallic Acid .....	● Sodium Hydro. 20% (cold) .....	● Synthetic Latex .....	● Viscose .....	● Furnace Gas (Cold) .....
Phosphoric Acid 50% (hot) .....	↑ Pyrogen Free Water .....	● Sodium Hydro. 20% (hot) .....		● Vortex-Hydroclone .....	● Furnace Gas (Hot) .....
Phosphoric Acid 50% (cold) .....	↑ Pyrole .....	● Sodium Hydro. 50% (cold) .....	● Taconite-Fines .....		
Phosphoric Acid 10% (cold) .....	● Pyromellitic Acid .....	● Sodium Hydro. 50% (hot) .....	● Talc-Slurry .....	● Water-Acid - Below pH7 .....	● Gas Drip Oil .....
Phosphoric Acid 10% (hot) .....	↑ Quebracho Tannin .....	● Sodium Hydro. 70% (cold) .....	↑ Tankage-Slurry .....	● Water pH7 to 8 .....	● Gas Flue .....
Phosphorous Molten .....		● Sodium Hydro. 70% (hot) .....	● Tannic Acid (cold) .....	↑ Water Alkaline - Over pH8 .....	● Gas Manufacturing .....
Phosphotungstic Acid .....	● Rag Stock Bleached .....	● Sodium Hypochlorite .....	● Tamin .....	● Water Mine Water .....	● Gas Natural .....
Photographic Sol. ....	● Rare Earth Salts .....	● Sodium Lignosulfonate .....	● Tar & Tar Oil .....	● Water Potable .....	● Gas .....
Phthalic Acid .....	● Rayon Acid Water .....	● Sodium Metasilicate .....	● Tartaric Acid .....	● Water River .....	● Helium .....
Phytate .....	● Rayon Spin Bath .....	● Sodium Molten .....	● Television Chemicals .....	● Water Sandy .....	● Hydrogen Gas - Cold .....
Phytate Salts .....	● Rosin in Alcohol .....	● Sodium Nitrate .....	● Tergitol § .....	● Water "White" - low pH .....	● Hydrogen Chloride .....
Pickling Acid, Sulfuric .....	● Rosin Size .....	● Sodium Nitrite-Nitrate .....	● Terpineol .....	● Water "White" - high pH .....	● Hydrogen Cyanide .....
Picric Acid Solutions .....	● Resorcinol .....	● Sodium Perborate .....	● Tetraethyl Lead .....	● Wax .....	● Hydrogen Sulfide - Wet & Dry .....
Pine Oil Finish .....	● River Water .....	● Sodium Peroxide .....	● Tetrahydrofuran .....	● Wax Chlorinated .....	
Plating Sol. as follows: .....	● Road Oil .....	● Sodium Persulfate .....	● Tetranitromethane .....	● Wax Emulsions .....	● Isobutane .....
Brass Cyanide .....	● Roccal .....	● Sodium Phosphate-Mono .....	● Textile Dyeing .....	● Weed Killer Dibromide .....	● Methane .....
Bronze-Cyanide .....	● Rosin-Wood .....	● Sodium Phosphate-Tri .....	● Textile Finishing Oil .....	● Weisberg Sulfate Plating .....	● Methyl Chloride .....
Chromium & Cadmium .....	● Rosin in Alcohol .....	● Sodium Potassium Chloride .....	● Textile Printing Oil .....	● Wood ground pulp .....	
Cyanide .....	● Rosin Size .....	● Sodium Salicylate .....	● Thiocyanic Acid .....	● Wort Lines .....	● Natural Gas - Dry .....
Cobalt Acid .....	● Rubber Latex .....	● Sodium Sesquicarbonate .....	● Thioglycolic Acid .....		● Nitrogen Gas .....
Copper Acid .....		● Sodium Silicate .....	● Thionyl Chloride .....	● X-Ray Developing Bath .....	● Nitrous Oxide .....
Copper Alk. ....	● Safole .....	● Sodium Silcofluoride .....	● Thiophosphoryl Chloride .....	● Xylene .....	
Gold Cyanide .....	● Salt Alkaline .....	● Sodium Stannate .....	● Thiourea .....		● Oil-Solvent Vapor .....
Iron-Acid .....	● Salt Electrolytic .....	● Sodium Sulfate .....	● Thionyl Nitrate .....	● Zelan .....	● Oxygen .....
Lead-Fluoro .....	● Salt Refrg. ....	● Sodium Sulfide .....	● Thymol .....	● Zeolite Water .....	● Ozone .....
Nickel Bright .....	● Sand-Air Blown Slurry .....	● Sodium Sulfite .....	● Tin Tetrachloride .....	● Zinc Acetate .....	
Platinum .....	● Sand-Air Phosphatic .....	● Sodium Sulfhydrate .....	● Tinning Sol. DuPont .....	● Zinc Bromide .....	● Producer Gas 50 PSI .....
Silver-Cyanide .....	● Sea Coal .....	● Sodium Thiocyanate .....	● Titanium Paper Coating .....	● Zinc Chloride .....	● Propane .....
Tin-Acid .....	● Sea Water .....	● Sodium Thiosulfate .....	● Titanium Oxide Slurry .....	● Zinc Cyanide-Alk. ....	● Propylene .....
Tin Alk. Barrel .....	● Selenium Chloride .....	● Sodium Tungstate .....	● Titanium Oxy Sulfate .....	● Zinc Fines Slurry .....	
Zinc Acid .....	● Sequestrene .....	● Sodium Xanthate .....	● Titanium Sulfate .....	● Zinc Flux Paste .....	● Steam High Pressure (< 70 psi) ....
Zinc Alk. Cyanide .....	● Sewage .....	● Solox-Denat. Ethanol .....	● Titanium Tetrachloride .....	● Zinc Galvanizing .....	● Steam Low Pressure (< 70 psi) ....
Polyacrylonitrile Slurry .....	● Shellac .....	● Soluble Oil .....	● Toluol .....	● Zinc Hydrosulfite .....	● Sulfur Dioxide .....
Polypentek .....	● Shower Water .....	● Solvent Naphthas .....	● Toluene .....	● Zinc Oxide in Water .....	● Sulfur Dioxide Dry .....
Polysulfide Liquor .....	● Silica Gel .....	● Sour Gasoline .....	● p-Toluene Sulfonic Acid .....	● Zinc Oxide in Oil .....	● Sulfur Trioxide Gas .....
Polyvinyl Acetate Slurry .....	● Silica Ground .....	● Soybean Sludge-Acid .....	● Transil Oil .....	● Zinc Sulfate .....	● Sulfuric Acid Vapor .....
Polyvinyl Chloride .....	● Silicone Tetrachloride .....	● Spensol Solution .....	● Trichloroacetic Acid .....	● Zinc Sulfate .....	
Porcelain Frit .....	● Silver Cyanide .....	● Stannic Chloride .....	● Trichlorethane 1,1,1 .....	● Zinconate .....	
Potash .....	□ Silver Iodide-Agu. ....	● Starch .....	● Trichlorethylene .....	● Zirconyl Nitrate .....	
			● Trichlorethylene-Dry .....	● Zirconyl Sulfate .....	

NOTE: 1. The above information does not constitute a recommendation of sealant use. It is intended only as a guide for consideration by the purchaser with the expectation of favorable confirming test results. It is impossible to test sealant reaction with the multitude of chemicals in existence, therefore, compatibility has been estimated based on a wide variety of customer experience.

2. With the stringent action of such chemicals as Freon §, strong cold acids and caustics, thorough evaluation is suggested. Sealing of hot corrosive chemicals is not recommended.

3. Contact Henkel Corporation for use with chemicals not covered by this information.

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