



Loctite Corporation, now Henkel Corporation, the pioneer of anaerobic adhesives, has applied this technology to create retaining compounds that increase the shear strength of cylindrical, non-threaded assemblies. Finding wide acceptance as a standard method for assembling press and slip-fitted parts, Loctite® brand retaining compounds fill the “inner space” between components and cure to form a strong precision assembly. Formulated in a selection of viscosities, gap filling ability, flexibility, and strength characteristics, Loctite® brand retaining compounds can be applied with automated process equipment or dispensed manually.

# RETAINING

## **Loctite® 603™ Retaining Compound**

### *Press Fit/Oil Tolerant*

A retaining compound tolerant of oil and other contamination. Seals and secures cylindrical assemblies up to 0.005" radial clearance. Fixtures in 10 minutes. Prevents fretting and corrosion of metal assemblies.

## **Loctite® 609™ Retaining Compound**

### *Press Fit/General Purpose*

A low viscosity retaining compound that bonds rigid metal assemblies. Ideal for gap distances up to 0.005" diameter. Fixtures in 10 minutes and provides a shear strength of 3,000 psi after 24 hours. Easily joins dissimilar metals. Withstands temperatures to 300°F.

## **Loctite® 620™ Retaining Compound**

### *Slip Fit/High Temperature*

A high temperature (450°F), high viscosity liquid retaining compound. Provides a shear strength of over 3,800 psi on steel. Locks and secures metal cylindrical assemblies up to .015" diameter clearance. Prevents metal fretting and corrosion. Seals against leakage.

## **Loctite® 635™ Retaining Compound**

### *Slip Fit/High Strength/Slow Cure*

A high viscosity, high strength retaining compound with slow cure speed to permit readjustment of parts during assembly.

## **Loctite® 638™ Retaining Compound**

### *Slip Fit/Maximum Strength*

A maximum strength retaining compound for use where high dynamic force or cyclic loading is expected. Locks cylindrical assemblies up to .010" diameter clearance. Fixtures in 5 minutes.

## **Loctite® 640™ Retaining Compound**

### *Press Fit/Medium Strength/ High Temperature*

A medium viscosity retaining compound that resists temperatures to 400°F.

## **Loctite® 641™ Retaining Compound**

### *Press & Slip Fit/Controlled Strength*

A controlled strength retaining compound that is ideal for cylindrical parts that require disassembly. Recommended for maximum diameter clearance of 0.008". Fixtures in 20 minutes.

## Loctite® 648™ Retaining Compound

### Press Fit/High Strength/Rapid Cure

A retaining compound recommended for continuous working temperatures up to 300°F. Fills gaps up to 0.006" diameter clearance. Fixtures in 5 minutes.

## Loctite® 660™ Quick Metal® Retaining Compound

### Press Fit Repair

A creamy, non-running adhesive/sealant. Repairs worn machine parts. Restores correct fit to mating assemblies. Fills gaps up to 0.020" diameter clearance.

## Loctite® 661™ Retaining Compound

### Slip Fit/UV Cure

Fast curing, high strength retaining compound. Achieves fixture strength in 5 minutes or in 15 seconds by exposing edge fillets to high intensity long wavelength UV light.

## Loctite® 675™ Retaining Compound

### Press Fit/Medium Strength





A low viscosity retaining compound that augments press fit assemblies. Slow cure speed permits readjustment of parts during assembly.

## Loctite® 680™ Retaining Compound


### Slip Fit/High Strength

A high viscosity retaining compound for joining fitted cylindrical parts. Fixtures in 10 minutes and provides a shear strength of 4,000 psi on steel after 24 hours. Fills diametral gap distances up to 0.015".

LOCTITE® BRAND RETAINING COMPOUNDS PROPERTIES CHART

PRODUCT	Item Number	Container	Typical Use	Color	Max. Gap Fill (Diametral)	Viscosity cP	Shear Strength Steel/Steel (psi)*	Temperature Range	Cure Speed, Steel @25°C	Recommended Primer	Specific Gravity	Agency Approvals
603™ 	21440 21441 21442	10 ml bottle 50 ml bottle 250 ml bottle	For close fitting parts with light contamination	Green	.005"	125	3,770	-65°F to 300°F	Fixture - 10 min. Full - 24 hrs.	N™ or T™	1.10	-
609™	60905 60921 60931 60941 60943	.5 ml capsule 10 ml bottle 50 ml bottle 250 ml bottle 1 liter bottle	1st generation to augment press fits	Green	.005"	125	2,300 (min.)	-65°F to 300°F	Fixture - 10 min. Full - 24 hrs.	N™ or T™	1.10	MIL-R-46082B for existing designs, CFIA
620™ 	62005 62015 62040 62070 62085	.5 ml capsule 10 ml bottle 50 ml bottle 250 ml bottle 1 liter bottle	For high temperature applications	Green	.015"	8,500	3,800	-65°F to 450°F	Fixture - 30 min. Full - 24 hrs.	N™ or T™	1.16	CFIA, ABS
635™	63531 63541	50 ml bottle 250 ml bottle	1st generation high strength for slip fits	Green	.010"	2,000	4,500	-65°F to 300°F	Fixture - 1 hr. Full - 24 hrs.	N™ or T™	1.05	MIL-R-46082B for existing designs
638™	21447 21448 21449	10 ml bottle 50 ml bottle 250 ml bottle	High strength for loose fitted parts	Green	.015"	2,500	4,500	-65°F to 300°F	Fixture - 10 min. Full - 24 hrs.	N™ or T™	1.09	CFIA
640™	64031 64041	50 ml bottle 250 ml bottle	For high temperature applications	Green	.007"	600	3,000	-65°F to 400°F	Fixture - 1 hr. Full - 24 hrs.	N™ or T™	1.12	MIL-R-46082B for existing designs
641™ 	28802 21458	10 ml bottle 50 ml bottle	Medium strength for easier disassembly	Yellow	.006"	525/1,950 Thixotropic	1,700	-65°F to 300°F	Fixture - 20 min. Full - 24 hrs.	N™ or T™	1.07	CFIA
648™	21443 21444 21445	10 ml bottle 50 ml bottle 250 ml bottle	Fast fixturing for close fitting parts; high strength for stainless steel	Green	.006"	500	3,900	-65°F to 350°F	Fixture - 5 min. Full - 24 hrs.	N™ or T™	1.13	-
660™ Quick Metal®	66010 66040 30287	6 ml tube 50 ml tube 250 ml tube	For repair of worn machinery parts	Silver	.020"	250,000/ 1,500,000 Thixotropic	3,335	-65°F to 300°F	Fixture - 20 min. Full - 24 hrs.	N™ or T™	1.13	CFIA
661™ 	66141	250 ml bottle	Fast UV anaerobic curing	Amber	.006"	500	3,500	-65°F to 350°F	Fixture - 5 min. Full - 24 hrs.	N™ or T™	1.11	-
675™	67541	250 ml bottle	1st generation for close fitting parts	Green	.005"	125	3,000	-65°F to 300°F	Fixture - 20 min. Full - 24 hrs.	N™ or T™	1.09	MIL-R-46082B for existing designs
680™	68005 68015 68035 68060 68090	.5 ml capsule 10 ml bottle 50 ml bottle 250 ml bottle 1 liter bottle	High strength for slip fitted parts	Green	.015"	1,250	2,800	-65°F to 300°F	Fixture - 10 min. Full - 24 hrs.	N™ or T™	1.11	NSF/ANSI 61, ABS

\* Varies with substrates.

 Indicates worldwide availability.