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?

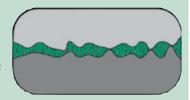
Interference fits typically have only 20-40% effective contact area!

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





RETAININGSecuring Cylindrical Assemblies

- » HIGH AND MODERATE STRENGTH PRODUCTS CAN CARRY HIGH LOADS AND ELIMINATE
- » REDUCE THE NEED FOR CLOSE TOLERANCES
- » 100% CONTACT LOAD AND STRESS ARE DISTRIBUTED EVENLY OVER THE JOINT

| ▶ WHAT SIZE IS THE GAP? | | | |
|---|--|--|--|
| | Yes (Gaps t | o 0.25mm) | |
| WHAT STRENGTH DO YOU REQUIRE? | Medium | Medium/High | |
| MAXIMUM TEMPERATURE | 150 | 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 | o.o5mm* / o.25mm | o.15mm* / o.25mm | |
| Compressive Shear Strength* N/mm² (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.

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 rotors to shafts, secure bushings and sleeves, and augment press fits.

^{*} Steel pin & collar cured for 2 hours @ 121°C.





| No (Gaps to 0.25mm) | | | | Yes (Gaps to 0.5mm) |
|---|---|---|-------------------------|---|
| | High | | Medium | High |
| 150 | o°C | 232°C | 150 | o°C |
| Slow Cure | Quick Cure | Very High Temperature | High Lubricity | Repairs Worn Parts |
| LOCTITE® 635 | LOCTITE® 680 | LOCTITE® 620 | LOCTITE® 232 | LOCTITE® 660 |
| 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 |
| o.o5mm / o.2mm | o.o5mm# / o.2mm | o.o5mm* / o.25mm | o.o5mm | o.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 |
| | iin sa. | January 18 | | |

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)



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.



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