

A close-up photograph of a person's hand using a screwdriver to work on a piece of machinery. The machinery is a Loctite adhesive dispenser, featuring a digital display showing '858', a pressure gauge, and various control buttons. The entire scene is bathed in a strong red light, creating a dramatic and industrial atmosphere. The Loctite logo is visible on the dispenser's nozzle and control panel.

INSTANT ADHESIVES

Fast, lightweight, multi-material bonding. **For more design options.**



PROBLEM

Without instant adhesives: Mechanical fastening options that add complexity, slow production or limit materials.

SOLUTION

With instant adhesives: Strong, fast lightweight bonding of a wide range of materials.

Bonds more material. Faster.

Instant adhesives are ideal for bonding small to medium-size parts with close fitting, smooth surfaces. They provide fast cure speeds and excellent bond strengths to a wide variety of substrates. LOCTITE instant adhesives are available in a range of formulations for anything from general purpose repairs to specialty high-performance assembly applications.



How to choose an instant adhesive.

GENERAL PURPOSE VS. SPECIALTY ADHESIVES

LOCTITE has an instant adhesive formulated for any application.

GENERAL PURPOSE

Strong and versatile enough for the vast majority of applications, including acidic surfaces such as chromated or galvanised metals and porous substrates such as wood, paper, leather, cork and fabric.

TOUGHENED

Elastomer modified adhesives for applications subjected to high shock, impact and humidity.

FLEXIBLE

For bonding materials subjected to bending or distortion, as well as flexible components.

HIGH TEMPERATURE

For operating temperatures up to 120 °C.

LOW ODOUR/LOW BLOOM

Low volatile adhesives for applications where cosmetic appearance, minimal frosting and low odour are required.

HIGH GAP FILL

For applications with gaps up to 0.15 mm. 2-K technologies provide fast cure independent of gaps up to 5 mm.

LIGHT CURE

Designed to cure very rapidly upon exposure to UV/visible light of the proper intensity.



VISCOSITY

Available in viscosities from thin liquids to thixotropic, no-run gels.



FIXTURE SPEED

Available in various fixture speeds to accommodate applications that may require instant set times to those that may require minor adjustment time.



STRENGTH

Available in shear resistant, general purpose formulations to toughened, high impact, high peel resistant formulations to meet the specific strength requirements of your application.



BEST SELLER

LOCTITE 401

Fast, Medium Viscosity

LOCTITE 401 is designed for the assembly of difficult-to-bond materials requiring uniform stress distribution and high tensile and/or shear strength. It provides for the rapid bonding of e.g. metals, plastics and elastomers. LOCTITE 401 is also suited to bonding porous materials such as wood, paper, leather and fabric. Perfect for all quick repairs and all types of small emergency repairs.

Approvals:

- P1 NSF Reg. No.: 123011



Viscosity:
100 mPa·s



Fixture time: 3 – 10 sec.



Strength:
20 N/mm²



BEST SELLER

LOCTITE 454

Gel

LOCTITE 454 is designed for the assembly of difficult-to-bond materials which require uniform stress distribution and high tensile and/or shear strength. It provides for the rapid bonding of e.g. metals, plastics and elastomers. The gel consistency enables overhead and vertical application without dripping. LOCTITE 454 is also suited to bonding porous materials such as wood, paper, leather and fabric. Perfect for all quick repair jobs.

Approvals:

- P1 NSF Reg. No.: 123009



Viscosity:
Gel



Fixture time: 5 – 10 sec.



Strength:
20.9 N/mm²



Find the right product for your application



General Purpose

LOCTITE 401
LOCTITE 406
LOCTITE 454
LOCTITE 495

Toughened

LOCTITE 435
LOCTITE 480

Low Odour / Low Bloom

LOCTITE 460

High Temperature

LOCTITE 4204

High Gap Fill

LOCTITE 3090

Flexible

LOCTITE 4902

Light Cure

LOCTITE 4310
LOCTITE 4311

Handy hints: 24 hours may be required for full cure. Refer to Technical Data Sheet for further details. To improve adhesion to difficult-to-bond materials use primer LOCTITE SF 770. To increase cure speed, use LOCTITE activator. Contact your Sales Engineer for further information

* For varying or undefined bond gaps up to 5 mm
** UV/Visible Light Sources: Electrodeless, H bulb: 30 mW/cm², measured @ 365 nm

Strength is measured on grit blasted mild steel

General Purpose



LOCTITE 401
Medium Viscosity



Viscosity: 100 mPa·s



Fixture time: 3 – 10 sec.



Strength: 20 N/mm²

Colour: Clear
Temperature resistance: 120 °C



LOCTITE 406
For plastics and elastomers



Viscosity: 20 mPa·s



Fixture time: 2 – 10 sec.



Strength: 15.5 N/mm²

Colour: Clear
Temperature resistance: 120 °C

Toughened



LOCTITE 435
Surface Insensitive



Viscosity: 200 mPa·s



Fixture time: 10 – 20 sec.



Strength: 19 N/mm²

Colour: Clear
Temperature resistance: 100 °C



LOCTITE 480
Black, High Strength, Slow Cure



Viscosity: 200 mPa·s



Fixture time: 20 – 50 sec.



Strength: 26 N/mm²

Colour: Black
Temperature resistance: 100 °C

Flexible



LOCTITE 4902
High Viscosity



Viscosity: 200 mPa·s



Fixture time: 5 – 45 sec.
Full cure: 24 hr



Strength: 12 N/mm²

Colour: Colourless/fluorescent
Temperature resistance: 80 °C



LOCTITE
454
Gel



Viscosity: Gel



Fixture time: 5 – 10 sec.



Strength: 20.9 N/mm²

Colour: Clear
Temperature resistance: 120 °C



LOCTITE
495
Low-Medium Viscosity



Viscosity: 30 mPa·s



Fixture time: 5 – 20 sec.



Strength: 14.2 N/mm²

Colour: Clear
Temperature resistance: 120 °C

**HAVE A UNIQUE APPLICATION?
SEE THE FULL LINE:**

<https://www.henkel-adhesives.com/uk/en/products/industrial-adhesives/instant-adhesives.html>

**Low Odour /
Low Bloom**



LOCTITE
460
Close Fitting Parts



Viscosity: 40 mPa·s



Fixture time: 5 – 20 sec.



Strength: 21 N/mm²

Colour: Colourless to straw
Temperature resistance: 80 °C

**High Viscosity /
High Temperature**



LOCTITE
4204
High Viscosity



Viscosity: 4,000 mPa·s



Fixture time: 10 – 30 sec.



Strength: 18.2 N/mm²

Colour: Slightly pale yellow / colourless
Temperature resistance: 120 °C

**High
Gap Fill**



LOCTITE
3090
2K Gel



Viscosity: Gel



Fixture time: 120 sec.*



Strength: 21 N/mm²

Colour: Clear to slightly cloudy
Temperature resistance: 80 °C

Light Cure



LOCTITE
4310
Low Viscosity



Viscosity: 170 mPa·s



Tack free time: ≥10 sec.**



Strength: 20.4 N/mm²

Colour: Light yellow-green to dark blue-green liquid
Temperature resistance: 100 °C



LOCTITE
4311
Medium Viscosity



Viscosity: 1,050 mPa·s



Tack free time: ≥10 sec.**



Strength: 21 N/mm²

Colour: Light yellow-green to dark blue-green liquid
Temperature resistance: 100 °C

Surface Preparation



LOCTITE SF 7070
Cleaner

Colour: Clear
Appearance: Liquid
Base: Hydrocarbon based solvent
Dry time: 5-30 min.



LOCTITE SF 770
Polyolefin Primer

Colour: Clear
Appearance: Liquid
Base: Iso-propyl acetate
Dry time: <30 sec.
On-part life: 8 hr



LOCTITE SF 7455
Accelerator

Colour: Clear
Appearance: Liquid
Base: Naptha
Dry time: ≥60 sec.
On-part life: 5-10 min.

Equipment



LOCTITE EQ PU20
Digital Peristaltic Dispenser
IDH 2265279

The LOCTITE EQ PU20 Digital Peristaltic Dispenser is a reliable and effective volumetric dispenser for single-component, low viscosity adhesives. It is great for precise dosing or applications that require a specific flow rate.



LOCTITE 97009
Semi-Automatic Dispensing System HP
(High Pressure)
IDH 215845

Enables dispensing of the adhesive directly from the larger bottles. The controller provides digital timing control for any LOCTITE automatic dispense valve or automatic hand-held applicator. It is equipped with a precision pressure regulator: >0.1 – 4.0 bar for viscosities >1,500 mPa·s.



LOCTITE EQ RC18
Semi-Automatic Dispensing System LP
(Low Pressure)
IDH 2260508

Enables dispensing of the adhesive directly from the larger bottles. The controller provides digital timing control for any LOCTITE automatic dispense valve or automatic hand-held applicator. It is equipped with a precision pressure regulator: >0.1 – 0.7 bar for the RC18 (Low Pressure) for viscosities <1,500 mPa·s.



LOCTITE EQ VA40
CA Volumetric Valve
IDH 2333708

A positive displacement metering valve designed for dispensing precise volumetric drops of CAs with each cycle. Positive displacement dispensing is not influenced by variations in pressure, time, temperature or adhesive viscosity therefore making the EQ VA40 an excellent choice for low to medium viscosity drop applications where accuracy and precision are required.



LOCTITE 98009
Light Cure Diaphragm Dispense Valve
IDH 218280

A normally closed diaphragm valve that provides high-resolution stroke adjustment and results in consistent flow control. This valve is specifically recommended for use with the Light Cure range of CA adhesives, LOCTITE 4310 and 4311



LOCTITE 98013
CA Diaphragm Dispense Valve
IDH 318654

A normally closed diaphragm valve that provides high-resolution stroke adjustment and results in consistent flow control. This valve is recommended for all CA adhesives with the exception of Light Cure CA adhesives



LOCTITE 97130
Ergoloc Valve
IDH 444643

A pneumatically operated handheld dispense valve, designed to be used in conjunction with pressure-time dispense systems. It is recommended for hand held dispensing of CA adhesives.

Please refer to page 130 for additional equipment/information.

INSTANT ADHESIVES

Product	Pack Size	Colour	Gap Fill (mm)	Viscosity (mPa*s)	Shear Strength, GBMS (N/mm ²)	Temperature Range (°C)	Fixture Speed, Steel (sec.)
GENERAL PURPOSE							
LOCTITE 401	3 g, 20 g, 50 g, 500 g	Clear	0.15	100	20	-40 to +120	3 – 10
LOCTITE 406	20 g, 50 g, 500 g	Clear	0.15	20	15.5	-40 to +120	2 – 10
LOCTITE 454	10 g, 20 g, 300 g	Clear	0.25	Gel	20.9	-40 to +120	5 – 10
LOCTITE 495	20 g, 50 g, 100 g, 500 g	Clear	0.15	30	14.2	-40 to +120	5 – 20
TOUGHENED							
LOCTITE 435	20 g, 500 g	Clear	0.15	200	19	-40 to +100	10 – 20
LOCTITE 480	20 g, 500 g	Black	0.15	200	26	-40 to +100	20 – 50
FLEXIBLE							
LOCTITE 4902	20 g	Colourless	0.15	200	12	-40 to +80	5 – 45
HIGH TEMPERATURE							
LOCTITE 4204	20 g	Slightly pale yellow/colourless	0.15	4,000	18.2	-40 to +120	10 – 30
LOW ODOUR/LOW BLOOM							
LOCTITE 460	20 g, 50 g, 500 g	Colourless to straw	0.15	40	21	-40 to +80	5 – 20
HIGH GAP FILL							
LOCTITE 3090	11 g	Clear to slightly cloudy	5	Gel	21	-40 to +80	120
LIGHT CURE							
LOCTITE 4310	28 g, 454 g	Light yellow-green to dark blue-green liquid	0.15	170	20.4	-40 to +100	20-30*
LOCTITE 4311	28 g, 454 g	Light yellow-green to dark blue-green liquid	0.15	1,050	21	-40 to +100	45-60*

* Note: Faster fixture times can be achieved with light cure.

LOCTITE SERVICES

REDUCE COMPLEXITY AND TIME WHILE EXPANDING DESIGN.

<https://www.henkel-adhesives.com/uk/en/insights/loctite-services-signup.html>

HOSPITAL

Improved Appearance, Durability and Production Speed



“LOCTITE helped make our signs more aesthetically pleasing and stronger while enabling us to ship more product faster.”

The thick bond lines and slow curing speed of a high-viscosity RTV used to bond aluminium letters to PVC sign boards was causing aesthetic issues and delaying production for a retail sign manufacturer. In addition, letters were sometimes lost due to the low bond strength of the RTV. **LOCTITE 401** Instant Adhesive, which cures more quickly and minimises the gap between the letters and the sign board, was an ideal solution.

A LOCTITE Engineering Solutions Expert showed how just a few small drops of **LOCTITE 401** on each sign letter, which was then applied to the sign board with light hand pressure, allowed the sign company to manufacture signs more quickly and provide customers with a higher quality product.

BENEFITS

LOCTITE 401 Instant Adhesive:

- Minimises gap and improves aesthetic appeal with thin bond lines
- Cures fast, minimising clamp time
- Production output maximised while lowering overall production costs
- Has high bond strength that eliminates loss of sign letters and addresses customer complaints