

LOCTITE®

INSTANT
solutions™

Faster. Stronger. Superior.
The best Loctite® Instant Adhesives ever.



The best Loctite® Instant Adhesives ever!

FASTER



STRONGER



SUPERIOR



Experience the most innovative Loctite® product range ever.

Bonding in seconds, Loctite® products lead the world in Instant Adhesive technology. Henkel has conducted a range of innovative product improvements and developed new products, thus enlarging the spectrum of applications in instant bonding.

Faster. Stronger. Superior. The best Loctite® Instant Adhesives you ever had!

In order to achieve the most efficient use, the new range is supported by:

- ◆ a new bottle offering enhanced ease and accuracy of dispensing
- ◆ a wide range of primers and accelerators
- ◆ a professional range of dispensing equipment for semi or fully automatic processes, adapted to the different Loctite® Instant Adhesive viscosities.

**See for yourself how much innovation every little drop
of Loctite® contains!**



Outstanding Innovation Highlights.



New products



Toughened

Loctite® 435

- ◆ Fast curing
- ◆ Colourless and transparent
- ◆ Also suitable for bonding porous and absorbent substrates as well as acidic surfaces
- ◆ Low viscosity

Loctite® 438

- ◆ Fast curing
- ◆ Colour: black
- ◆ Also suitable for bonding porous and absorbent substrates as well as acidic surfaces
- ◆ Low viscosity

Product enhancements



Universal

Loctite® 401

- ◆ Improved fixture speed on a wider range of porous substrates
- ◆ Longer shelf life

Loctite® 431

- ◆ Improved fixture speed on a wider range of porous substrates
- ◆ Longer shelf life
- ◆ Improved bond strength, especially on metals

Loctite® 454

- ◆ Improved fixture speed



Low bloom, low odour

Loctite® 403

Loctite® 408

Loctite® 460

- ◆ Improved fixture speed on metals and plastics
- ◆ Improved bond strength on a wide range of substrates
- ◆ Now suitable for bonding porous and absorbent substrates as well as acidic surfaces
- ◆ Longer shelf life

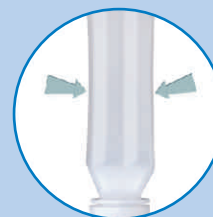
New Loctite® bottle



new nozzle –
optimal
dispensing
accuracy
and control



high
flexibility
and perfect
flow control
– easy to
squeeze






safer use –
close with a
click



Faster

for general purpose.



| Top features | Application | Loctite® products | |
|--|--|-------------------|--|
|  Universal <ul style="list-style-type: none"> General purpose, bond most substrates For porous substrates such as wood, paper, leather, cork and fabric For acidic surfaces such as chromated or galvanised surfaces | Bonding examples: <ul style="list-style-type: none"> Synthetic rubber feet to ABS housing Absorbing material to steel sheet Safety rubber pads to aluminium ladder steps PVC to paper for packaging materials | 401 | <ul style="list-style-type: none"> Low viscosity Improved fixture speed |
| | | 431 | <ul style="list-style-type: none"> Medium viscosity Improved bond strength |
| | | 454 | <ul style="list-style-type: none"> Gel For vertical and overhead surfaces and/or larger gaps Improved fixture speed |
|  Plastics & Rubber <ul style="list-style-type: none"> Bond most plastics For elastomers and rubbers, including EPDM, NBR, SBR, Nitrile For difficult to bond materials: PE, PP, PTFE, thermoplastic rubbers or silicon rubbers when combined with a Loctite® Polyolefin Primer | Bonding examples: <ul style="list-style-type: none"> Rubber o-rings Rubber seals Braided sleeve to rubber heater hose Plastic housing base to fire extinguisher bottle | 406 | <ul style="list-style-type: none"> Very fast fixture speed Low viscosity |
| | | 495 | <ul style="list-style-type: none"> Very low viscosity General Purpose |
| | | 407 | <ul style="list-style-type: none"> Low viscosity Good heat ageing properties |
| | | 420 | <ul style="list-style-type: none"> Very Low viscosity Excellent heat ageing properties |
|  Metal <ul style="list-style-type: none"> High strength adhesive Particularly high bond strength on metals Good adhesion to rubber and plastics | Bonding examples: <ul style="list-style-type: none"> Aluminium potentiometer scale to painted steel control box Small bearings into plastic/metal housings Strain gauges in position. Abrasive tips to machine tools | 415 | <ul style="list-style-type: none"> High viscosity |
| | | 430 | <ul style="list-style-type: none"> For close fitting parts |
| | | 496 | <ul style="list-style-type: none"> Low viscosity |



Stronger

for challenging environments.









| Top features | Application | Loctite® products | |
|--|---|-------------------|---|
| <div> Toughened </div> <ul style="list-style-type: none"> High resistance to impact and shock loads; high peel strength Good resistance in humid and/or chemical environments Designed to bond plastics, rubber and metals | Bonding examples: <ul style="list-style-type: none"> Rubber tyre to ABS wheel on model car Rubber tube to rubber fitting Ferrite magnets to plastic housing Loudspeakers parts | 435 New | <ul style="list-style-type: none"> Fast curing adhesive Colourless and transparent Also for porous and absorbent substrates and acidic surfaces Low viscosity |
| | | 438 New | <ul style="list-style-type: none"> Fast curing adhesive Colour: black Also for porous and absorbent substrates and acidic surfaces Low viscosity |
| | | 480 | <ul style="list-style-type: none"> Ideal for bonding metal to metal, rubber or magnets (ferrite, etc.) Colour: black Low viscosity |
| <div> High temperature </div> <ul style="list-style-type: none"> Excellent hot strength and heat aging capabilities Good resistance in humid and/or chemical environments Good resistance to impact, shock and peel loads | Bonding examples: <ul style="list-style-type: none"> E-cores Steel cover plates in transformers Plastic or metal housings of electrical motors Disk drives | 4203 | <ul style="list-style-type: none"> Low viscosity |
| | | 4204 | <ul style="list-style-type: none"> Medium viscosity |
| | | HVHT | <ul style="list-style-type: none"> High viscosity High temperature |



Superior

for demanding applications.






| Top features | Application | Loctite® products | | |
|--|--|-------------------|---|---|
| <div> Low bloom, low odour</div> <ul style="list-style-type: none">Where low odour is requiredWhere cosmetic appearance is importantImproved fixture speed on metals and plasticsFor porous and absorbent substrates and acidic surfaces | Bonding examples: <ul style="list-style-type: none">PA plug in stainless steel sensor housingABS inner part on wood body of a fountain penClear plastic display SystemsHousing components of electrical appliances | 403 | <ul style="list-style-type: none">High viscosity |  |
| | | 408 | <ul style="list-style-type: none">Very low viscosity | |
| | | 460 | <ul style="list-style-type: none">Medium viscosity | |
| <div> Flexible</div> <ul style="list-style-type: none">Especially designed for bonding flexible materials and componentsEnsure flexibility even through the bond lineAlso for porous and absorbent substrates and acidic surfaces | Bonding examples: <ul style="list-style-type: none">Flexible rubber profile to painted steel refrigerator doorFlexible gaskets and SealsMaterials used in manufacture and repairLoudspeakers parts | 4850 | <ul style="list-style-type: none">Medium viscosity |  |
| | | 4860 | <ul style="list-style-type: none">High viscosity | |
| <div> UV Curing</div> <ul style="list-style-type: none">Extremely fast cure with UV or visible lightGood cosmetic appearanceGood adhesion to plastics, rubber and metalsCure exposed adhesive without the need of an activator | Bonding examples: <ul style="list-style-type: none">PVC tube to ABS connectorPC windows to ABS housingLogos and plastics parts in the cosmetic industryPolyurethane foam to PVC plastics | 4304 | <ul style="list-style-type: none">Low viscosityLight yellow-green and transparent |  |
| | | 4305 | <ul style="list-style-type: none">High viscosityLight yellow-green and transparent | |

Product Selector Chart



LOCTITE®

| | | Substrate | | | | Design considerations | | | | Environment | | Properties | | Aspect | | Process | | | |
|--|---|---------------------|--------|-------------------------|-------------------------------|-----------------------|-----------------|-----------------|----------------------|-------------|---------------------|------------------|------------------------|------------------------|------------------------|-----------|-----------------|--------------------------|--------------------------|
| | | Plastics and rubber | Metals | Magnets (ferrite, etc.) | Porous and/or acidic surfaces | Polyolefins | Viscosity mPa.s | Fillet cure | Vertical application | Larger gap | High temperature °C | Shock resistance | Flexibility | Colour | Cosmetic appearance | Low odour | Fixture speed | Pack size | |
| <div></div> <div>Faster</div> <div>for general purpose.</div> |  | Universal | | X | X | XX | X ³ | 100 | | | 80 | | | Colourless Transparent | | | XX | Bottle 20 g | |
| | | | | X | X | XX | X ³ | 900 | X ¹ | X | X | 80 | | | Colourless Transparent | | | X | Bottle 20 g |
| | | | | X | X | XX | X ³ | Gel | X ¹ | XX | XX | 80 | | | Colourless Transparent | | | XX | Tube 20 g, Cartr. 300 g |
| | | Plastics & rubber | | XX | X | | | XX ³ | 20 | | | 80 | | | Colourless Transparent | | | XX | Bottle 20 g, 500 g, 1 kg |
| | | | | XX | X | | | X ³ | 20 | | | 80 | | | Colourless Transparent | | | X | Bottle 20 g |
| | | | | XX | X | | | X ³ | 25 | | | 120 | | | Colourless Transparent | | | XX | Bottle 20 g |
| | | | | XX | X | | | X ³ | 4 | | | 80 | | | Colourless Transparent | | | X | Bottle 20 g |
| Metal | | X | XX | | | X ³ | 1200 | X ¹ | X | X | 80 | | | Colourless Transparent | | | X | Bottle 20 g | |
| | | X | XX | | | X ³ | 80 | | | 80 | | | Colourless Transparent | | | X | Bottle 20 g | | |
| | | X | XX | | | X ³ | 125 | | | 80 | | | Colourless Transparent | | | X | Bottle 20 g | | |
| | | XX | X | X | XX | X ³ | 200 | | | 100 | X | XX | | Colourless Transparent | | | XX | Bottle 20 g, 50 g, 500 g | |
| Toughened |  | | XX | X | X | XX | X ³ | 200 | | | 100 | X | XX | Black | | | XX | Bottle 20 g, 50 g, 500 g | |
| | | | XX | X | X | XX | X ³ | 200 | | | 100 | X | XX | Black | | | X | Bottle 20 g | |
| | | | X | XX | XX | | X ³ | 200 | | | 100 | X | XX | | | | X | Tube 20 g | |
| | | | X | X | X | | X ³ | 400 | | | 120 | XX | XX | Colourless Transparent | | | X | Bottle 20 g | |
| High temperature | HVHT | | X | X | X | | X ³ | 1100 | | | 120 | | | Colourless Transparent | | | XX | Bottle 20 g | |
| | | | X | X | | XX | X ³ | 120 | X ¹ | X | X | 80 | | | Colourless Transparent | XX | | X | Bottle 20 g |
| Low bloom, low odour | | | X | | | XX | X ³ | 5 | | | 80 | | | Colourless Transparent | XX | | X | Bottle 20 g | |
| | | | X | X | | XX | X ³ | 40 | | | 80 | | | Colourless Transparent | XX | | X | Bottle 20 g, 1 lb | |
| | | | XX | X | | XX | X ³ | 400 | | | 70 | | | Colourless Transparent | | | X | Bottle 20 g | |
| Flexible | | | XX | X | | XX | X ³ | 4000 | X ¹ | X | 70 | | XX | Colourless Transparent | | | X | Bottle 20 g | |
| | | | XX | X | | XX | X ³ | 20 | X ² | | 80 | | | Colourless Transparent | XX | | XX ² | Bottle 20 g | |
| UV Curing | | | X | X | | | X ³ | 900 | X ² | X | 80 | X | XX | Colourless Transparent | XX | | XX ² | Bottle 20 g | |
| | | | X | X | | | X ³ | | | | 80 | | | Colourless Transparent | XX | | XX ² | Bottle 20 g | |

Please note: - Loctite® Instant Adhesives perform best on clean surfaces. Dirt, grease and foreign matter should be removed using Loctite® cleaner
- Always wipe the nozzle of the adhesive container after use
- Optimal storage: 2 °C to 8 °C
Legende: x: good xx: very good xx²: cure with UV light
; in combination with Activator Loctite® 7452 ; in combination with Primer Loctite® 770

Dispensing Equipment & Surface Preparation



Semi-automatic dispensing systems

Low volume application

98548

peristaltic dispenser

- ◆ Dispensing of beads and drops
- ◆ High dispensing accuracy independent of temperature or viscosity variations
- ◆ For low to medium viscosity Loctite® Instant Adhesives, out of original package
- ◆ Programmable flow rate
- ◆ Simple load mechanism and easy cleaning
- ◆ Snuff-back effect prevents dripping of the fluid
- ◆ Air-free dispensing

Medium to high volume application

97009

integrated controller & reservoir in combination with

97130 ErgoLoc hand-held valve

- ◆ Dispensing of beads and drops
- ◆ Automatic adhesive level sensing to prevent air entrapment
- ◆ Reservoir suitable for 500 g and 2 kg pack sizes
- ◆ Maintenance-free system (up to 2 million cycles)
- ◆ Ergonomic valve
- ◆ End of cycle relay output for system integration



Automatic dispensing equipment

Pressure-time dispensing system

97123

automatic controller in combination with

97106

modular reservoir

98013

stationary valve

- ◆ High accuracy of drop and bead dispensing
- ◆ For low to high viscosity Loctite® Instant Adhesives
- ◆ Reservoir suitable for 500 g pack size
- ◆ Upgrade option for flow monitoring

Volumetric dispensing equipment

97643 VoluBrane volumetric pump

- ◆ High accuracy of drop dispensing
- ◆ No influence of temperature or viscosity variation
- ◆ Can be integrated into automatic production lines
- ◆ For low to high viscosity Loctite® Instant Adhesives
- ◆ Optional:
 - Loctite® 97102 or Loctite® 97123: automatic controller
 - Loctite® 97106: modular reservoir



Primers

Improve adhesion on difficult to bond substrates

770

- ◆ Polyolefin Primer
- ◆ Especially for PE and PP
- ◆ Also suitable for silicone and PTFE
- ◆ Long on-part life
- ◆ Fluorescent under UV light / black light



Activators

Accelerate cure of Loctite® Instant Adhesives

7452

- ◆ Particularly suitable for post-application
- ◆ Excellent for cosmetic applications, for clear and transparent adhesive beads or fillets
- ◆ Not suitable for stress cracking sensitive plastics

7455

- ◆ Pre- and post-application
- ◆ Provides fast cure when post-applied
- ◆ Suitable for all plastics

7458

- ◆ Long on-part life when pre-applied
- ◆ Provides particularly fast cure when post-applied
- ◆ Very good for cosmetic applications: for clear and transparent adhesive beads or fillets
- ◆ Fluorescent under UV light / black light
- ◆ Suitable for all plastics

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