STRUCTURAL ADHESIVES

Superior speed, aesthetics and strength. Without the weight.

PROBLEM

With traditional fastening: Added weight, time, cost and difficulty.

SOLUTION

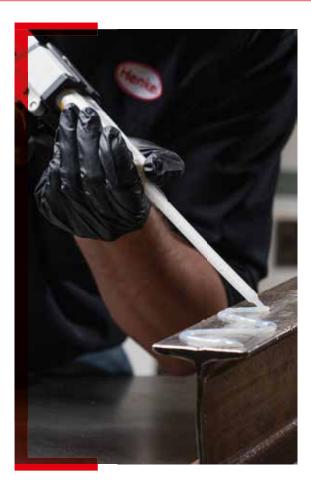
With structural adhesives: Lightweight, strong, durable, less expensive fastening with better end product aesthetics.

Take off the weight. Take on the load.

Structural adhesives join two materials firmly and permanently. The adhesive is the "bridge" between the substrates and provides advantages such as:

- Uniform stress distribution for better product reliability
- Design freedom for light weight constructions

Adhesives are easy to apply and assemble. The selection of the right adhesive depends on some factors like adhesive-material compatibility and joint requirements.



How to choose a structural adhesive.

GENERAL PURPOSE VS. SPECIALTY ADHESIVES

LOCTITE has a wide range of structural adhesives, from general purpose – strong and versatile enough to cover the majority of applications, to specialty - formulated for cases where special properties are needed.

HIGH PERFORMANCE

Solutions designed for a range of product needs, with respect to impact strength, peel strength, durability, working time

FLEXIBLE SOLUTIONS

Offering excellent shock absorption, elasticity and adhesion to plastics, metals and glass.

SPECIAL SUBSTRATES

From epoxies designed to be safe for food and water contact to acrylics and polyurethanes for bonding e-coated metals, rigid foams, plastics and glass.

BONDING FERRITE COMPONENTS

Epoxies and acrylics designed for the specific requirements of bonding ferrite (magnets).

POTTING

Flowable epoxies designed for filling cavities and protecting components.

Legend for your adhesive choice:



etc.

FIXTURE TIME

A range of fixture times from ultra fast to slow to meet your process requirements.



LOCTITE structural adhesives can bond most materials.



LOCTITE AA 326

Fast Fixture, Small Gaps, 2-Step

LOCTITE AA 326 is a yellow to amber, 2K no mix, medium viscosity (thixotropic) structural and magnet bonder which is activated with LOCTITE SF 7649. It has good adhesion to different types of ferrites, a fixture time of 3 minutes and a shear strength of 15 N/mm². It can be used in temperature up to 120 °C.

Benefits:

- Fast fixture
- High strength
- All purpose bonder



Fixture time: 3 min.









LOCTITE EA 3430

Optically Clear, Water-Resistant

LOCTITE EA 3430 is a 2K, clear epoxy adhesive which cures rapidly at room temperature after mixing. It is a general purpose adhesive which develops high strength on a wide range of substrates. The gap filling properties make this adhesive system suitable for rough and poorly fitting surfaces.

Benefits:

- High transparent
- Water resistance
- Fast curing



Fixture time: 15 min.

Substrate: Metal, glass, ceramic, rigid plastic

STRUCTURAL ADHESIVES

Find the right product for your application

General Purpose



Fixture time: 3 min

Substrate: Metals, ceramic, plastics

Г



GENERAL PURPOSE

LOCTITE AA 330 **LOCTITE AA 326 LOCTITE EA 3421** LOCTITE EA 3423

SPECIALTY

Working Life/Heat Cure

WORKING LIFE

Time ranges (before assembly) from fast to slow to meet your process requirements.

≥ 1 Hour

<1 Hour **LOCTITE EA 3450 LOCTITE EA 9450 LOCTITE EA 9461** LOCTITE EA 3430

LOCTITE EA 9483 LOCTITE EA 9497

Heat Cure

LOCTITE EA 9514

High Performance

LOCTITE AA 3342 LOCTITE EA 9492 **LOCTITE AA 3298 LOCTITE EA 9466**

Plastic Repair

TEROSON PU 9225

TEROSON PU 9225 SF TEROSON PU 9225 SF ME TEROSON PU 9225 UF ME

Multi-Substrate Repair Bonder

TEROSON PU 6700 TEROSON PU 6700 ME



Substrate: Aluminium, steel, ferrite

Gap: 0.5 mm Temperature resistance: 120 °C Colour: Pale yellow Chemistry: Two-step acrylic Activator: LOCTITE SF 7388







Working life: 30 - 60 min.

Working life: 30 - 150 min.



Substrate: Metals, ceramics, rigid plastics, wood

Substrate: Metals (can be sanded)

Temperature resistance: 120 °C Colour: Clear ambe Chemistry: 2K Epoxy

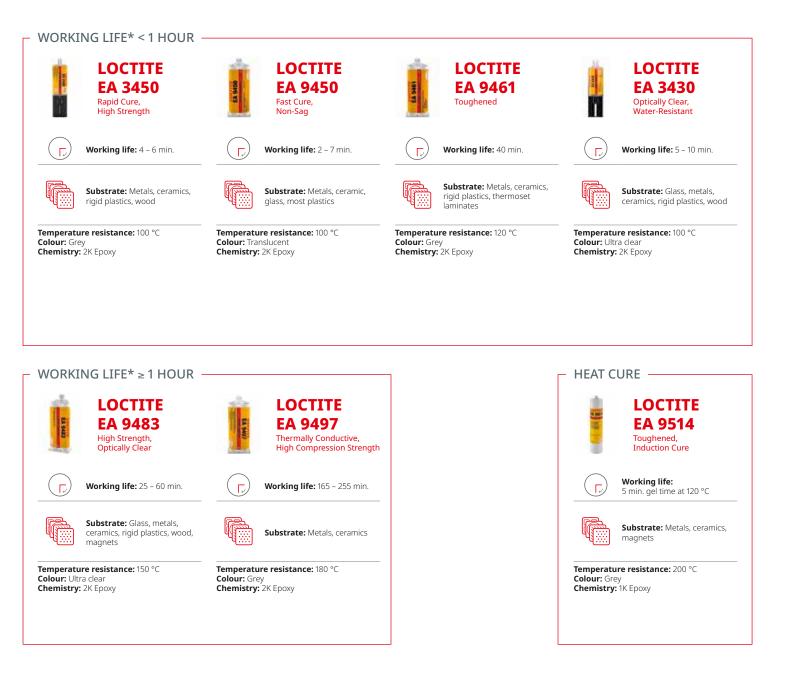
Temperature resistance: 120 °C Colour: Grev Chemistry: 2K Epoxy

LOCTITE SERVICES

IMPROVE STRENGTH AND AESTHETICS IN REDUCED TIME.

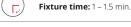
https://www.henkel-adhesives.com/uk/ en/insights/loctite-services-signup.html

Work Life/Heat Cure



High Performance





Substrate: Metals, magnets

Gap (if applicable): 0.5 mm Temperature resistance: 180 °C Colour: Dark vellow

Chemistry: Two-step acrylic Activator: LOCTITE SF 7386



AA 3298 Glass Bonding

Fixture time: 3 min.



Gap (if applicable): 0.5 mm Temperature resistance: 120 °C Colour: Straw vellow Chemistry: Two-step acrylic Activator: LOCTITE SF 7386

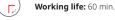


Working life: 15 min.



Temperature resistance: 180 °C Colour: White Chemistry: 2K Epoxy







Substrate: Metals, ceramics,

Temperature resistance: 120 °C Colour: Off-white Chemistry: 2K Epoxy

Plastic Repair





Pot life/Working life: 10 min.



Substrate: Paintable plastic parts



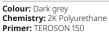
Colour: Dark grey Chemistry: 2K Polyurethane Primer: TEROSON 150



Pot life/Working life: 2 min.

TEROSON







TEROSON PU 9225 UF ME Ultra Fast Cure, MicroEmission™

Pot life/Working life: . 1 min. max.



Substrate: Paintable plastic parts

Colour: Black Chemistry: 2K Polyurethane Primer: TEROSON 150

Multi-Substrate Repair Bonder



TEROSON PU 6700 Solvent-Free



Pot life/Working life: 10 min.



Substrate: Metals, plastics, painted surfaces, wood

Colour: Dark grey Chemistry: 2K Polyurethane Paintable / Sandable: Yes





TEROSON PU 6700 ME

Fast Curing, MicroEmission™

Colour: Dark grey Chemistry: 2K Polyurethane Paintable / Sandable: Yes

L. Pot life/Working life: 2 min. Substrate: Paintable plastic

parts Colour: Dark grey

Chemistry: 2K Polyurethane Primer: TEROSON 150

Equipment

DISPENSERS

Pneumatic



Manual



50 ml

LOCTITE 96001 50 ml 1:1/2:1 Dual Cartridge Applicator Manual IDH 26745

LOCTITE 97042 50 ml 1:1/2:1 Dual Cartridge Applicator Pneumatic IDH 476898

50 ml 10:1 Dual Cartridge Applicator Manual IDH 1034026

50 ml 10:1 Dual Cartridge Applicator Pneumatic IDH 1493310 **200 ml** LOCTITE EQ HD14 200 ml Dual Cartridge Manual Dispenser

1:1 - 10:1 IDH 2693822

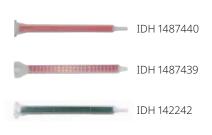
LOCTITE EQ HD14 200 ml Dual Cartridge Pneumatic Dispenser 1:1 - 10:1 IDH 2693824

400 ml

LOCTITE EQ HD14 400 ml Dual Cartridge Manual Dispenser 1:1 – 10:1 IDH2693823

LOCTITE EQ HD14 400 ml Dual Cartridge Pneumatic Dispenser 1:1 - 10:1 IDH2693825

NOZZLES



50 ml Epoxy Nozzle 400 ml

Epoxy Nozzle

50 ml Polyurethane Nozzle

HAVE A UNIQUE APPLICATION? SEE THE FULL LINE:

https://www.henkel-adhesives. com/uk/en/products/industrial-adhesives/structural-adhesives.html

Please refer to page 130 for additional equipment/information.



STRUCTURAL ADHESIVES

2-STEP ACRYLICS										
Product	Pack Size	Features	Colour	Viscosity (mPa•s)	Gap Fill (mm)	Fixture Time (min.)	Shear Strength, GBMS (N/mm²)	Temperature Resistance (°C)		
GENERAL PUI	GENERAL PURPOSE									
LOCTITE AA 330	50 ml kit	General purpose adhesive for metals, ceramic, plastics	Pale yellow	67,500	0,5	3	23	120		
MAGNET BON	MAGNET BONDING									
LOCTITE AA 326	50 ml	Ferrites to plated materials in electric motors, loudspeakers hardware, jewellery	Light amber	18,000	0,5	3	15	120		
LOCTITE AA 3342	300 ml	High temperature magnet adhesive for metals, magnets	Dark yellow	90,000	0,5	1 – 1.5	23	180		
GLASS BONDING										
LOCTITE AA 3298	300 ml	Excellent glass bonder	Straw yellow	29,000	0,5	3	29	120		

EPOXIES										
Product	Pack Size	Features	Colour	Viscosity (mPa•s)	Mix Ratio	Fixture Time (min.)	Shear Strength, GBMS (N/mm²)	Temperature Resistance (°C)		
HIGH PERFORMANCE										
LOCTITE EA 3421	50 ml	Universal adhesive with long working time	Clear amber-yellow	37,000	1:1	240	22	120		
LOCTITE EA 3423	50 ml, 200 ml	Universal adhesive, excellent for metals, good moisture resistance	Grey	300,000	1:1	180	17	120		
LOCTITE EA 9461	50 ml	High impact resistant, gap filling	Grey	72,000	1:1	240	25	120		
LOCTITE EA 9466	50 ml, 400 ml	High impact and peel resistance, excellent bond strength to a wide variety of plastics and metals	Off-White	35,000	2:1	180	37	120		
LOCTITE EA 9483	50 ml, 400 ml	Optical clarity and high strength, ideal for bonding decorative panels and displays	Ultra Clear	7,000	2:1	210	23	150		
LOCTITE EA 9492	50 ml, 400 ml	High temperature and chemical resistance	White	30,000	2:1	75	20	180		
LOCTITE EA 9497	50 ml	High temperature, thermally conductive, room temperature cure	Grey	12,000	2:1	480	20	180		
FAST FIXTURE										
LOCTITE EA 3430	24 ml, 50 ml	Universal, fast curing	Ultra Clear	23,000	1:1	15	22	100		
LOCTITE EA 3450	25 ml	Fast curing, ideal for metal repairs	Grey	35,000	1:1	15	25	100		
LOCTITE EA 9450	50 ml	Fast curing, gap filling	Translucent	200,000	1:1	13	23	100		
ONE PART/HEAT CURE										
LOCTITE EA 9514	300 ml	High temperature resistance and mechanical strength, excellent impact resistance	Grey opaque paste	45	_	_	44	200		

POLYURETHANES									
Product	Pack Size	Features	Colour	Pot Life <i>/</i> Working Time (min.)	Cure Time @ RT (h)	Paintable?	Sandable?	MicroEmission™?	
TEROSON PU 6700	50 ml, 310 ml, 400 ml	Solvent-free, multi-purpose bonder for metals, plastics, wood, painted surfaces	Grey	10	6	Yes	Yes	No	
TEROSON PU 6700 ME	50 ml, 400 ml	Solvent-free, multi-purpose bonder for metals, plastics, wood, painted surfaces	Grey	5	5	Yes	Yes	Yes	
TEROSON PU 9225	50 ml	Fast curing repair adhesive, in combination with plastics the use of an approved Henkel primer is absolutely necessary	Dark Grey	10	5	Yes	Yes	No	
TEROSON PU 9225 SF	50 ml	Fast curing repair adhesive, in combination with plastics the use of an approved Henkel primer is absolutely necessary	Dark Grey	2	1.5	Yes	Yes	No	
TEROSON PU 9225 SF ME	50 ml	Fast curing repair adhesive, in combination with plastics the use of an approved Henkel primer is absolutely necessary	Dark Grey	2	1.5	Yes	Yes	Yes	
TEROSON PU 9225 UF ME	50 ml	Fast curing repair adhesive, in combination with plastics the use of an approved Henkel primer is absolutely necessary	Black	1 max.	1.5	Yes	Yes	Yes	

