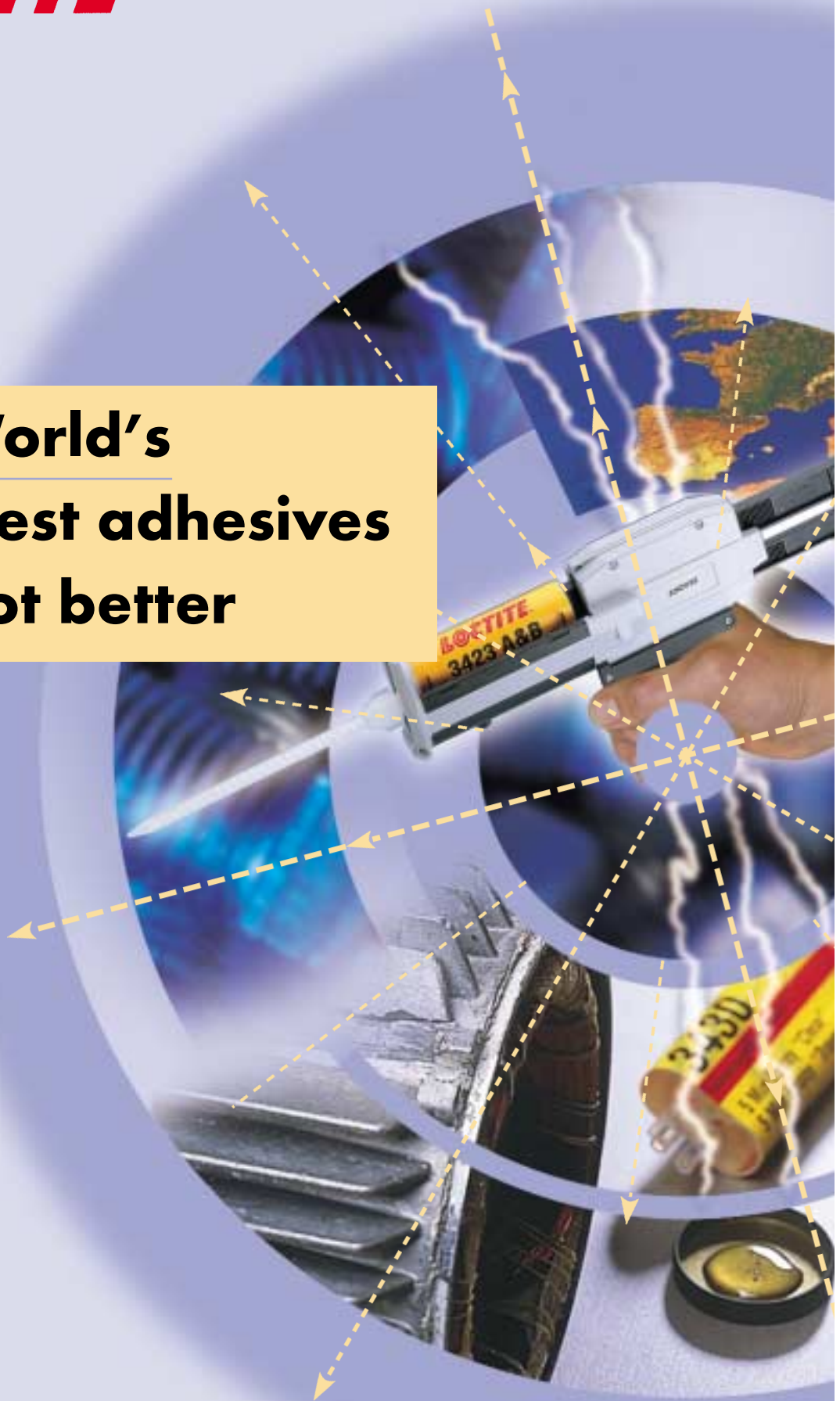


# LOCTITE

## The World's toughest adhesives just got better

- High strength
- Durable
- Easier mix and application
- Optical clarity
- Low odour levels





# New, superior epoxy adhesives

When Loctite applies its latest technology to a range of epoxy multi-purpose structural adhesives, the result has to be a better choice. Now design, production and maintenance engineers can select the exact product they require.

They can choose a 7-minute fixture time when a fast cure is vital. Alternatively, they can pick a slow cure when alignment is tricky or large areas have to be covered.

Parts can be close fitting or have a gap up to 3 mm; operate at freezing or boiling temperatures; and be of metal, ceramic, rigid plastics, wood or glass – or a mixture of these substrates.

Cured bonds can be subjected to compression, torsion, shear, humidity, solvents, coolants, aggressive chemicals, and oils. And they can be invisible: the new Loctite range includes an adhesive of such optical clarity that if two pieces of glass were bonded together, the bondline would be totally transparent.

The bugbears of correct mix proportions and incomplete joints have also been resolved. The 50 ml and 200 ml products are packaged in easy-to-use, side-by-side cartridges with static mixing nozzles. These devices assure that the Loctite structural adhesive is mixed correctly during dispensing.

Finally, there is another additional advantage: Loctite has the capability to formulate structural adhesives as per production requirements to meet specific performance and application needs.

## The Choice

### Loctite 3421 Multi-purpose

- Slow-curing adhesive
- Excellent humidity and water resistant
- Very high shear strength
- Long working life – ideal for bonding large surface

### Loctite 3422 Multi-purpose, fast cure

- Fast-curing adhesive - at room temperature will give fixture strength in 7 minutes
- Non sag
- Fills gaps of up to 3 mm
- Can be used for metal assemblies given a subsequent paint-and-bake cycle

### Loctite 3430 Multi-purpose, ultra clear

- Fast-curing – fixtures in 12 minutes
- Ideal for applications requiring a clear bond line.

### Loctite 3423 Metal coloured

- Multi-purpose adhesive for large (3 mm) bond gaps
- High viscosity
- High chemical resistance and heat ageing properties
- Ideal for bonding metal surfaces

### Loctite 3425 Toughened

- High viscosity, toughened adhesive for bond gaps up to 3 mm
- High shear strength
- Good chemical and humidity resistance
- Suitable for plastics such as GRP\* and SMC\*



Products from the International Research and Development centres of Loctite.

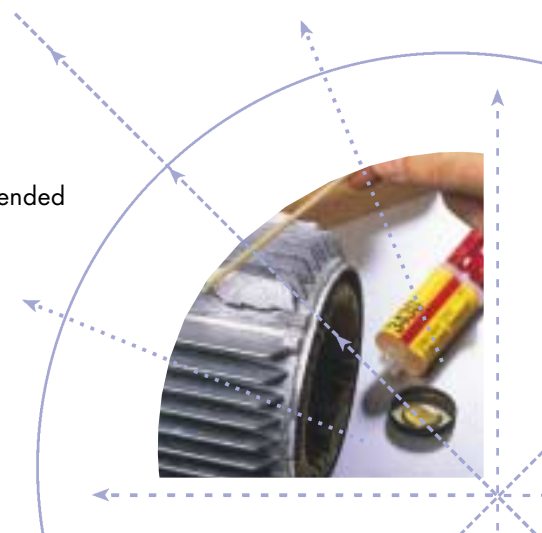
\* GRP = Glass Reinforced Plastic  
SMC = Sheet Moulded Compound

## Selector Guide

Note: this guide is for initial product selection only. Potential users are recommended to contact Loctite Technical Services to obtain full technical data and assistance with evaluation of chosen adhesives.

## Convenient Package Sizes

The 50 ml and 200 ml structural adhesives are packaged in easy-to-use, side-by-side cartridges allowing these high performance adhesives to be dispensed as easily as any one part system.



## Technical summary

		3421	3422	3423	3425	3430
<b>Features</b>		High Performance, Long Working Life, Low Odour, Flowable, Multi-Purpose, Excellent Humidity and Water Resistance	General Purpose, Fast Cure Low Odour	High Chemical Resistance, Thixotropic Paste, Low Odour, Metal Bonding Adhesive	General Purpose, Resistance, Non Sag, Thixotropic, Long Working Life, Low Odour	Multi Purpose, Ultra Clear, Low Odour
<b>Colour</b>	Mixed	Clear Amber	Pale Yellow	Grey	Off White	Ultra Clear
	A	Clear	Clear Amber	Grey	Cream/White	Clear
	B	Clear Amber	White	Opaque	Opaque	Clear Amber
Brookfield Viscosity**** (mPa.s) (Spindle 6 or 7 @ 5 rpm)	A	60,000 - 100,000	45,000 - 90,000	100,000 - 400,000	1,500,000 - 3,500,000	20,000 - 30,000
	B	9,000 - 19,000	25,000 - 50,000	200,000 - 500,000	100,000 - 300,000	20,000 - 30,000
Mix Ratio Vol.		1 to 1	1 to 1	1 to 1	1 to 1	1 to 1
Mix Ratio Weight A/B		1 to 0.9	1 to 1	1 to 0.7	1 to 1	Not Applicable
Open Gap Fill Maximum (mm)		1	3	3	3	1
Working Life (min.)		180	3	60	90	4
Fixture Time** (min.)		280	7	90	150	12
Full Cure Strength @ 22 °C (h)		36	2	12	24	2
Shear Strength* (N/mm <sup>2</sup> )						
Tested @ 23 °C		23	18	23	25	20
Tested @ RT. after 40 °C 98 % RH for 1000 hrs		23	15	23	25	12
Performance after Paint Bake Cycle***		23	30	15	Not Recommended	Not Recommended
Tested @ RT. in 1 mm Open Gap		20	7	16	18	-
Hardness (Shore D)		70 - 80	70 - 80	70 - 80	70 - 80	50 - 70
Pack Sizes						
24 ml twin Syringe (manual mixing)						●
50 ml dual Cartridge (with static mixer)		●	●	●	●	
200 ml dual Cartridge (with static mixer)		●	●	●	●	
2x0,9 litre Tins		●	●	●	●	

\* Grit Blasted Mild Steel Lapshears, 7 day cure    \*\* Light Handling 0.1 N/mm<sup>2</sup>    \*\*\* 180 °C for 30 minutes tested at RT    \*\*\*\* Product 3425 A, B, viscosity measured using spindle 7 @ 1 rpm

# Automatic mixing, precision application

The 50 ml and 200 ml Loctite structural adhesives are automatically mixed in their correct proportions and applied without waste, in quantities determined by production needs.

Operators do not need to touch the products; workplaces remain clean; the potential for misuse of the products is minimised. The complete control of the application ensures that, compared with hit-and-miss manual methods, adhesive savings can be as high as 50 %.

- 50 ml and 200 ml dual Cartridge with static mixers  
For manual dispensing. This ensures that the mix is constant, repeatable and accurate.
- 24 ml twin Syringe for Loctite 3430  
Can be mixed by hand on the bench for small batch work.
- 2 x 0,9 litre Tins  
These can be mixed when large quantities are required

For details of standard equipment, its inclusion in existing production lines or custom-built dispensing/application methods, please contact Loctite.



The data contained herein are intended as reference only. Please contact your local Loctite subsidiary for assistance and recommendations on specifications for these products.

## LOCTITE

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