# ADHESWES

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





### PROBLEM

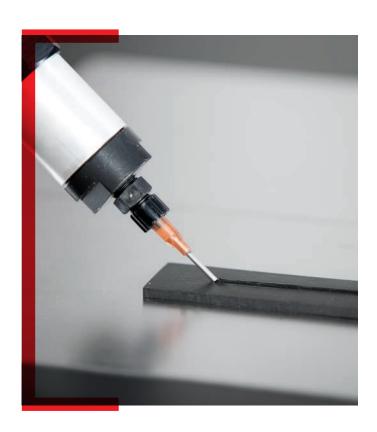
Without instant adhesives: Fastening options that add complexity, slow production or limit materials.

### 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 almost 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, and acidic surfaces.

**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 is required.

**HIGH GAP FILL** – For applications with gaps up to 0.15 mm. 2-K technologies provide fast cure independent of gaps up to 5mm.



### 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.

# Find the right product for your application



### **General Purpose**

LOCTITE® 401™

LOCTITE® 406™

LOCTITE® 454™

### **High Gap Fill**

LOCTITE® 3090™

### **General Maintenance**

LOCTITE® 407™

LOCTITE® 416™

LOCTITE® 424™

LOCTITE® 4471™

### **Toughened**

LOCTITE® 410™

LOCTITE® 435™

LOCTITE® 438™

LOCTITE® 480™

### Low Odour / Low Bloom

LOCTITE® 403™

LOCTITE® 408™

LOCTITE® 460™



## **General Purpose**

**INSTANT ADHESIVES** 



**401**<sup>™</sup> Low Viscosity



Viscosity: 110 mPa.s



**Fixture Speed:** 5 seconds **Full Cure:** 24 hours



Strength: 20 N/mm²

Colour: Clear

**Temperature Resistance:** 120°C



**406**<sup>™</sup> Wicking Grade



Viscosity: 20 mPa.s



**Fixture Speed:** 20-45 seconds **Full Cure:** 24 hours



Strength: 15.5 N/mm<sup>2</sup>

Colour: Clear

Temperature Resistance: 120°C





**454**<sup>™</sup> No-Run Gel



Viscosity: Gel



**Fixture Speed:** 30-60 seconds **Full Cure:** 24 hours



Strength: 20.9 N/mm<sup>2</sup>

Colour: Clear

Temperature Resistance: 120°C

# **High Gap Fill**

**INSTANT ADHESIVES** 



**3090**<sup>™</sup> Two-component Gel



Viscosity: Gel



Fixture Speed: 90-180 seconds
Full Cure: 24 hours



Strength: 21 N/mm²

**Colour:** Clear to Slightly Cloudy **Temperature Resistance:** 80°C



### **General Maintenance**

INSTANT ADHESIVES



**407**<sup>™</sup> General Purpose



Viscosity: 40 mPa.s



Fixture Speed: 10-30 seconds Full Cure: 24 hours



Strength: 21 N/mm<sup>2</sup>

Colour: Transparent, colourless to straw Temperature Resistance: 100°C



**High Viscosity** 



Viscosity: 1325 mPa.s



Fixture Speed: 20-50 seconds Full Cure: 24 hours



Strength: 22 N/mm<sup>2</sup>

Colour: Clear

Temperature Resistance: 80°C



**Rubber Bonding** 



Viscosity: 110 mPa.s



Fixture Speed: 15-30 seconds Full Cure: 24 hours



Strength: 22 N/mm²

Colour: Transparent, colourless to straw Temperature Resistance: 80°C



# **Toughened**

**INSTANT ADHESIVES** 



**410**™ Black, Gap Filling



Viscosity: 3350 mPa.s



Fixture Speed: 60-120 seconds Full Cure: 24 hours



Strength: 22 N/mm<sup>2</sup>

Colour: Black

Temperature Resistance: 80°C



Clear, Surface Insensitive



Viscosity: 175 mPa.s



Fixture Speed: 30-45 seconds Full Cure: 24 hours



Strength: 19 N/mm<sup>2</sup>

Colour: Clear

Temperature Resistance: 100°C



Black version of 435



Viscosity: 175 mPa.s



Fixture Speed: 30-45 seconds Full Cure: 24 hours



Strength: 19 N/mm<sup>2</sup>

Colour: Black Temperature Resistance: 100°C



**480**™ Black, High Strength



Viscosity: 150 mPa.s



Fixture Speed: 60-120 seconds Full Cure: 24 hours



Strength: 26 N/mm<sup>2</sup>

Colour: Black Temperature Resistance: 82°C

# Low Odour / Low Bloom

**INSTANT ADHESIVES** 



403' Gap Filling



Viscosity: 1325 mPa.s



Fixture Speed: 20-45 seconds Full Cure: 24 hours



Colour: Transparent, Colourless to Pale

Temperature Resistance: 100°C

Strength: 20.3 N/mm<sup>2</sup>

Colour: Transparent, Colourless to Straw Temperature Resistance: 100°C



Wicking Grade



Viscosity: 7 mPa.s



Fixture Speed: 20-30 seconds Full Cure: 24 hours



Strength: 20.8 N/mm<sup>2</sup>



**4**60' Low Viscosity



Viscosity: 40 mPa.s



Fixture Speed: 10-30 seconds Full Cure: 24 hours



Strength: 21 N/mm<sup>2</sup>

Colour: Transparent, Colourless to straw Temperature Resistance: 100°C



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Product	Item Number	Pack Size	Colour	Viscosity (mPa.s)	Max Gap Fill	Fixture Speed, Steel (sec)	Shear Stength, GBMS	Temperature Range
GENERA	L PURPO	SE				1		
401™	547691	3 g	Clear	110	0.127 mm	5	20 N/mm² 2900 psi	-40°C to 120°C
	265607	25 ml						
	265618	100 ml						
	265620	500 ml						
406 <sup>™</sup>	265606	25 ml	Clear	20 Gel	0.102 mm 0.254 mm	20 - 45	15.5 N/mm² 2250 psi 20.9 N/mm² 3030 psi	-40°C to 120°C
	265619	100 ml						
	265621	500 ml						
	233998 466862	3 g						
	234004	20 g 200 g						
GENEDA	L MAINT	_						
BENERA	LMAINT	ENANGI					21 N/mm2	
407™	233732	100 g	Transparent, colourless to straw	40	0.102 mm	10 - 30	21 N/mm² 3045 psi	-40°C to 100°C
416™	461520	25 ml	Clear	1325	0.203 mm	20 - 50	22 N/mm² 3190 psi	-40°C to 80°C
424™	265609	25ml	Transparent, colourless to straw	110	0.127 mm	15 - 30	22 N/mm² 3190 psi	-40°C to 80°C
4471™	158530	20 g	Clear	625	0.178 mm	10 - 20	22 N/mm² 3190 psi	-40°C to 80°C
TOUGHE	NED							
410™	135444	20 g	Black	3350	0.203 mm	60 - 120	22 N/mm² 3190 psi	-40°C to 80°C
435™	914156	25 g	Clear	175	0.152 mm	30 - 45	19 N/mm² 2700 psi	-40°C to 100°C
	840071	500 ml						
<b>438</b> ™	914155	25 ml	Black	175	0.152 mm	30 - 45	19 N/mm² 2700 psi	-40°C to 100°C
480™	1831562	20 g	Black	150	0.152 mm	60 - 120	26 N/mm² 3800 psi	-40°C to 82°C
	135253	500 g						
LOW ODG	JUR / LO	W BLOO	M					
403 <sup>™</sup>	1919337	20 g	Transparent, colourless to pale yellow	1325	0.203 mm	20 - 45	20.3 N/mm² 2940 psi	-40°C to 100°C
408™	473128	25 ml	Transparent, colourless to straw	7	0.051 mm	20 - 30	20.8 N/mm² 3020 psi	-40°C to 100°C
460™	473121	25 ml	Transparent,	40	0.102 mm	10 - 30	21 N/mm² 3060 psi	-40°C to 100°C
uieu ea	142600	500 g	23.5d.1.253 to 3ti dW				3 5 5 5 PSI	
HIGH GA	PFILL							
3090™	1379599	10 g	Clear to slightly cloudy	Gel	5.0 mm	90 - 180	21 N/mm² 3045 psi	-40°C to 80°C