

Technology	Acrylic
Chemical Type	Modified acrylate
Appearance (uncured)	Transparent liquid ^{LMS}
Components	One component - requires no mixing
Viscosity	Medium
Cure	Ultraviolet (UV) light
Cure Benefit	Production - high speed curing
Application	Bonding, Potting or Sealing

Block Shear Strength, ISO 13445:

Steel to Glass	N/mm ²	10
	(psi)	(1,450)
Aluminum to Glass	N/mm ²	4.1
	(psi)	(600)
Stainless steel to Glass	N/mm ²	2.6
	(psi)	(370)
G-10 Epoxyglass to Glass	N/mm ²	6
	(psi)	(870)
PVC to Glass	N/mm ²	2.8
	(psi)	(410)
ABS to Glass	N/mm ²	1
	(psi)	(145)
Polycarbonate to Glass	N/mm ²	1.2
	(psi)	(180)
Acrylic to Glass	N/mm ²	1
	(psi)	(145)
135° Peel Strength:		
Glass	N/mm	6.8
	(lb/in)	(39)
Cured @ 6 mW/cm ² @ 365 nm for 30 seconds		
Torsional Shear Strength, ASTM D 3658:		
Aluminum hex button to Glass	N-m	≥61 ^{LMS}
	(lb-ft)	(≥45)

TYPICAL ENVIRONMENTAL RESISTANCE**Heat Aging**

Aged at temperature indicated and tested @ 22 °C

Lap Shear Strength, ISO 4587, % of initial strength:

Glass to Glass:

0 gap:

Aged @ 121°C for 500 hours	100
Aged @ 121°C for 1,000 hours	100
Aged @ 149°C for 500 hours	100
Aged @ 149°C for 1,000 hours	100

0.5 mm gap:

Aged @ 121°C for 500 hours	95
Aged @ 121°C for 1,000 hours	95
Aged @ 149°C for 500 hours	100
Aged @ 149°C for 1,000 hours	100

Torsional Shear Strength, ASTM D 3658, % of initial strength:

Aluminum hex button to Glass:

Aged @ 121°C for 500 hours	100
Aged @ 121°C for 1,000 hours	100
Aged @ 149°C for 500 hours	95
Aged @ 149°C for 1,000 hours	55

Humidity Resistance

Aged @ 49°C / condensing humidity and tested @ 22 °C

Torsional Shear Strength, ASTM D 3658, % of initial strength:

Aluminum hex button to Glass:

Aged 2 weeks	100
Aged 4 weeks	100

Lap Shear Strength, ISO 4587, % of initial strength:

Glass to Glass:

Aged 2 weeks:	
0 gap	100
0.5 mm gap	100
Aged 4 weeks:	
0 gap	100
0.5 mm gap	100

Block Shear Strength, ISO 13445, % of initial strength:

Aluminum to Glass:

Aged 2 weeks	100
Aged 4 weeks	100

Stainless steel to Glass:

Aged 2 weeks	100
Aged 4 weeks	100

G-10 Epoxyglass to Glass:

Aged 2 weeks	100
Aged 4 weeks	100

PVC to Glass:

Aged 2 weeks	70
Aged 4 weeks	60

ABS to Glass:

Aged 2 weeks	100
Aged 4 weeks	70

Polycarbonate to Glass:

Aged 2 weeks	100
Aged 4 weeks	90

Acrylic to Glass:

Aged 2 weeks	95
Aged 4 weeks	75

Dishwasher Cycle Resistance

Aged at continuous dishwasher cycling and tested at 22°C

Torsional Shear Strength, ASTM D 3658, % of initial strength:

Aluminum hex button to Glass:

Aged 25 Cycles	100
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Lap Shear Strength, ISO 4587, % of initial strength:

Glass to Glass:

Aged 25 Cycles:

0 gap	100
0.5 mm gap	90

Block Shear Strength, ISO 13445, % of initial strength:

Aluminum to Glass:

Aged 25 Cycles	100
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Stainless steel to Glass:

Aged 25 Cycles	100
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G-10 Epoxyglass to Glass:

Aged 25 Cycles	100
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PVC to Glass:

Aged 25 Cycles	50
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ABS to Glass:

Aged 25 Cycles	65
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Polycarbonate to Glass:

Aged 25 Cycles	60
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Acrylic to Glass:

Aged 25 Cycles	90
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GENERAL INFORMATION

This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be selected as a sealant for chlorine or other strong oxidizing materials.

For safe handling information on this product, consult the Material Safety Data Sheet (MSDS).

Directions for use

1. This product is light sensitive; exposure to daylight, UV light and artificial lighting should be kept to a minimum during storage and handling.
2. The product should be dispensed from applicators with black feedlines.
3. For best performance bond surfaces should be clean and free from grease.
4. Cure rate is dependent on lamp intensity, distance from light source, depth of cure needed or bondline gap and light transmittance of the substrate through which the radiation must pass.
5. Recommended intensity for cure in an adhesive application (between substrates) is 40 mW/cm² minimum (measured at the bondline) with an exposure time of 5-6 times the fixture time at this same intensity.
6. For tack free surface cure, as necessary in coating, potting or tacking applications, higher intensity UV is required (100mW/cm² minimum).
7. Cooling should be provided for temperature sensitive substrates such as thermoplastics.
8. Plastic grades should be checked for risk of stress cracking when exposed to liquid adhesive.
9. Excess uncured adhesive can be wiped away with organic solvent (e.g. Acetone).
10. Bonds should be allowed to cool before subjecting to any service loads.

Loctite Material Specification^{LMS}

LMS dated February 7, 1996. Test reports for each batch are available for the indicated properties. LMS test reports include selected QC test parameters considered appropriate to specifications for customer use. Additionally, comprehensive controls are in place to assure product quality and consistency. Special customer specification requirements may be coordinated through Henkel Quality.

Storage

Store product in the unopened container in a dry location. Storage information may be indicated on the product container labeling.

Optimal Storage: 8 °C to 21 °C. Storage below 8 °C or greater than 28 °C can adversely affect product properties.

Material removed from containers may be contaminated during use. Do not return product to the original container. Henkel Corporation cannot assume responsibility for product which has been contaminated or stored under conditions other than those previously indicated. If additional information is required, please contact your local Technical Service Center or Customer Service Representative.

Conversions

$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$
 kV/mm x 25.4 = V/mil
 mm / 25.4 = inches
 N x 0.225 = lb
 N/mm x 5.71 = lb/in
 N/mm² x 145 = psi
 MPa x 145 = psi
 N·m x 8.851 = lb·in
 N·m x 0.738 = lb·ft
 N·mm x 0.142 = oz·in
 mPa·s = cP

Note

The data contained herein are furnished for information only and are believed to be reliable. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof. In light of the foregoing, **Henkel Corporation specifically disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale or use of Henkel Corporation's products. Henkel Corporation specifically disclaims any liability for consequential or incidental damages of any kind, including lost profits.** The discussion herein of various processes or compositions is not to be interpreted as representation that they are free from domination of patents owned by others or as a license under any Henkel Corporation patents that may cover such processes or compositions. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide. This product may be covered by one or more United States or foreign patents or patent applications.

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