



LOCTITE UK 1367 B10

February 2018

PRODUCT DESCRIPTION

LOCTITE UK 1367 B10 provides the following product characteristics:

Technology	Polyurethane
Product Type	Structural Adhesive
Cure	Polyaddition
Condition	Solvent-free
Components	Two-components
Component A	Resin
Component B	Hardener
Application	General assembly
Appearance (Comp. A)	beige
Appearance (Comp. B)	green
Mixing Ratio, by weight Comp. A : Comp. B	4.7 : 1
Mixing Ratio, by volume Comp. A : Comp. B	4 : 1

LOCTITE UK 1367 B10 provides good adhesion to various substrates, requires only low processing pressure due to the low viscosity, provides an excellent moisture and environmental seal, produces no toxic fumes and provides a good balance of low and high temperature performance. Typical application is as a structural bonder for metal and plastics.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Part A Properties:

Weight per volume	kg/L	0.18
	(lbs/gal)	(1.46)
Viscosity @ 25°C, mPa·s (cP)		21,600
Cone & Plate Rheometer, Cone CP50-1 @ shear rate 50 s ⁻¹		

Flash Point - See SDS

Part B Properties:

Weight per volume	kg/L	0.15
	(lbs/gal)	(1.26)
Viscosity @ 25°C, mPa·s (cP)		12,290
Cone & Plate Rheometer, Cone CP50-1 @ shear rate 50 s ⁻¹		

Flash Point - See SDS

Mixed Properties:

Weight per volume	kg/L	0.17
	(lbs/gal)	(1.41)
Viscosity @ 25°C, mPa·s (cP)		33,760
Cone & Plate Rheometer, Cone CP50-1 @ shear rate 50 s ⁻¹		

TYPICAL CURING PERFORMANCE

Fixture Time

Fixture Time, ISO 4587, minutes:	
Grit Blasted Mild Steel 0.005 mm gap	35

Curing Properties

Working Time on Steel, minutes	30
Working Time on Aluminium, minutes	30
Working Time on Polyethylene, minutes	30

Peak Exotherm Temperature

Peak Temperature Time, minutes	14
Peak Exotherm Temperature, 20 gram mass, °C	48

TYPICAL PERFORMANCE OF CURED MATERIAL

After 72 hours @ 21°C and 0.13 mm gap

Shear Strength

Lap Shear Strength, :

Grit Blasted Mild Steel (GBMS)	MPa	10.7
	(psi)	(1,550)
Aluminum	MPa	6.1
	(psi)	(880)
Aluminum (Grit blasted)	MPa	9.6
	(psi)	(1,400)
Stainless Steel	MPa	7.6
	(psi)	(1,100)
FRP	MPa	2.3
	(psi)	(330)
Gelcoat	MPa	7.4
	(psi)	(1,070)

Block Shear Strength, ISO 13445:

ABS	MPa	10.5
	(psi)	(1,520)
Acrylic	MPa	1.0
	(psi)	(150)
Epoxy	MPa	9.2
	(psi)	(1,330)
Glass	MPa	15.5
	(psi)	(2,250)
Polycarbonate	MPa	10.6
	(psi)	(1,540)
PVC	MPa	3.7
	(psi)	(540)

"T" Peel Strength, ISO 11339:

Aluminum (Grit blasted)	N/mm	1.8
	(lb/in)	(10)

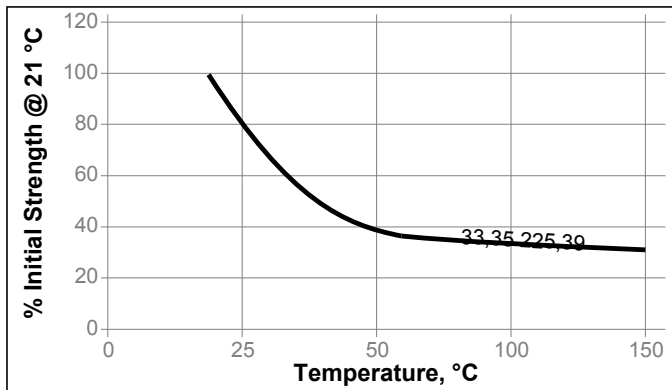
Miscellaneous, Impact Strength, ISO 9653, J:

Aluminum (Grit blasted)	40
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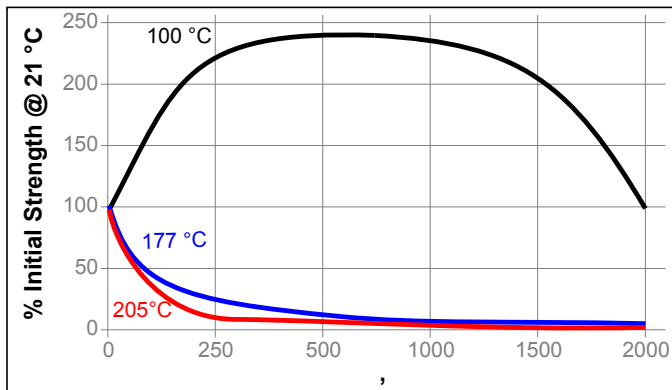
Hot Strength

Cured for 72 hours @ 21 °C / 50% RH, on grit-blasted steel with 0.13 mm gap



Heat Aging

Cured for 72 hours @ 21 °C / 50% RH, on grit-blasted steel with 0.13 mm gap



Chemical/Solvent Resistance

Shear Strength on Grit Blasted Mild Steel (GBMS) Lapshears, Aged under conditions indicated and tested @ 22°C

Environment	°C	% of initial strength	
		500 h	1000 h
Air	87	240	109
Water	22	182	98
Salt fog	35	192	90
Condensing Humidity	49	242	106
95% RH	40	226	149

GENERAL INFORMATION

This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be used with chlorine or other strong oxidizing materials.

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

Directions For Use:

1. For high strength structural bonds, remove surface contaminants such as paint, oxide films, oils, dust, mold release agents and all other surface contaminants.
2. Use gloves to minimize skin contact. DO NOT use solvents for cleaning hands.
3. **Dual Cartridges:** To use simply insert the cartridge into the application gun and start the plunger into the cylinders using light pressure on the trigger. Next, remove the cartridge cap and expel a small amount of adhesive to be sure both sides are flowing evenly and freely. If automatic mixing of resin and hardener is desired, attach the mixing nozzle to the end of the cartridge and begin dispensing the adhesive. For hand mixing, expel the desired amount of the adhesive and mix thoroughly. Mix for approximately 15 seconds after uniform color is obtained. **Bulk containers:** Mix thoroughly by weight or volume in the proportions specified in Product Description section. Mix vigorously approximately 15 seconds after uniform color is obtained.
4. For maximum bond strength apply adhesive evenly to both surfaces to be joined.
5. Application to the substrates should be made within 3 to 5 minutes. Larger quantities and/or higher temperatures will reduce this working time.
6. Join the adhesive coated surfaces and allow to cure at 25 °C (77 °F) for 24 hours for high strength. Heat up to 93 °C (200 °F), will speed curing.
7. Keep parts from moving during cure. Contact pressure is necessary. Maximum shear strength is obtained with a 3 to 9 mm bond line.
8. Excessive uncured adhesive can be cleaned up with ketone type solvents.

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 Henkel Representative.

Conversions

- (°C x 1.8) + 32 = °F
- kV/mm x 25.4 = V/mil
- mm / 25.4 = inches
- µm / 25.4 = mil
- 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

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