Technical Data Sheet

LOCTITE® DOUBLE BUBBLE™

July 2018

PRODUCT DESCRIPTION

LOCTITE® DOUBLE BUBBLE™ provides the following product characteristics:

Technology	Epoxy
Appearance (Resin)	Clear
Appearance (Hardener)	Clear to pale yellow
Appearance (Mixture)	Clear to pale yellow
Components	Two components - requires mixing
Mix Ratio, (by volume) Resin : Hardener	1 : 1
Mix Ratio, (by weight) Resin : Hardener	100 : 94
Cure	Room temperature cure after mixing
Application	Bonding

LOCTITE® DOUBLE BUBBLE™ will bond to a wide variety of materials (wood, metal, plastic, ceramic) and cures rapidly to give handling strength in approximately 5 minutes. Packed into a handy sachet and supplied complete with a mixing stick and pallet, this product is suitable for the rapid assembly of small components or for fast and effective repair work.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Resin:

Specific Gravity @ 25 °C	1.2
Viscosity, mPa·s (cP)	60,000
Flash Point - See SDS	

Hardener:

Specific Gravity @ 25 °C	1.13
Viscosity, mPa·s (cP)	12,000
Flash Point - See SDS	

Mixed:

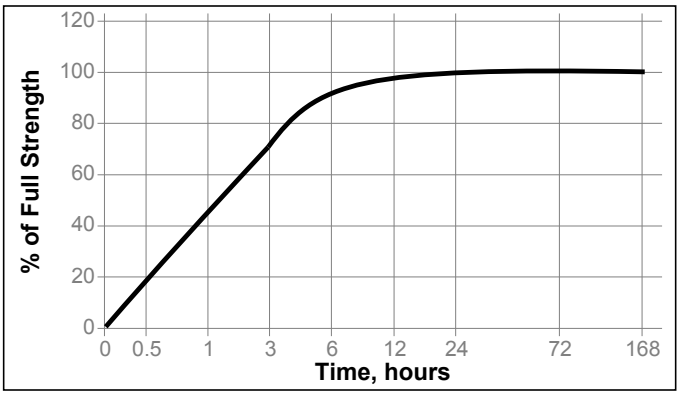
Specific Gravity @ 25 °C	1.16
Viscosity, mPa·s (cP)	35,000

TYPICAL CURING PERFORMANCE

Working life, minutes	3
Full Cure Time @ 23 °C, hours	24

Cure Speed vs. Time

The graph below shows the shear strength developed with time on grit-blasted steel lapshears.



TYPICAL PERFORMANCE OF CURED MATERIAL

Adhesive Properties

After 1 week @ 22°C

Shear Strength

Lap Shear Strength, :

Mild steel	N/mm²	11
	(psi)	(1,625)
Grit Blasted Mild Steel (GBMS)	N/mm²	18
	(psi)	(2,625)
Stainless Steel	N/mm²	9.6
	(psi)	(1,390)
Aluminum	N/mm²	4.9
	(psi)	(710)
Aluminum (Gritblasted)	N/mm²	13
	(psi)	(1,915)
Polycarbonate	N/mm²	4.3
	(psi)	(625)
PVC	N/mm²	1.2
	(psi)	(175)
Epoxyglass	N/mm²	7.4
	(psi)	(1,075)
Zinc dichromate	N/mm²	7.3
	(psi)	(1,060)

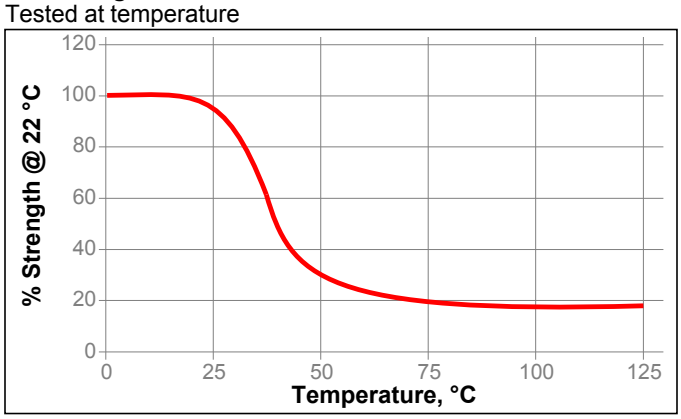
TYPICAL ENVIRONMENTAL RESISTANCE

Cured for 1 week @ 22 °C

Lap Shear Strength, ISO 4587:

Grit Blasted Mild Steel (GBMS)

Hot Strength
Tested at temperature



GENERAL INFORMATION

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

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.

Directions for use:

1. Bond areas should be clean and free from grease. Clean all surfaces with a Loctite® cleaning solvent and allow to dry.
2. For maximum strength, surface abrasion is recommended. A fine to medium grit emery cloth or sandpaper is best. Wash after abrading.
3. Pour resin and hardener from pouches onto the provided mixing palette.
4. Mix resin and hardener on palette with mixing stick until the product has a uniform color. The adhesive is packaged in a pre-measured kit. This ensures consistent performance since resin and hardener are always properly measured.
5. For maximum bond strength, apply adhesive evenly to both surfaces to be joined.
6. Application to the substrates should be made within 3 minutes. Larger quantities and/or higher temperatures will reduce this working time.
7. Join the adhesive coated surfaces and allow to cure. Higher temperatures will speed up curing.
8. Keep assembled parts from moving during cure. The bond should be allowed to develop full strength before subjecting to any service load.
9. Excessive uncured adhesive can be cleaned up with ketone type solvents.

Not for product specifications
The technical data contained herein are intended as reference only. Please contact your local quality department for assistance and recommendations on specifications for this product.

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
(°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:
The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. The product can have a variety of different applications as well as differing application and working conditions in your environment that are beyond our control. Henkel is, therefore, not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product.
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Reference 0.