Technical Data Sheet

LOCTITE ABLESTIK KE 4238

October 2014

PRODUCT DESCRIPTION

LOCTITE ABLESTIK KE 4238 provides the following product characteristics:

Technology	Epoxy
Appearance, Resin (Component A)	Silver
Appearance, Hardener (Component B)	Gardener 10
Appearance (cured)	Silver
Product Benefits	• 100% Solids material • High volume conductivity • High bond strength • High reliability
Components	Two component - requires mixing
Mixing Ratio, by weight Component A: Component B	100 : 8
Cure	Room Temperature or Heat Cure
Application	Electrically Conductive Adhesive
Typical Assembly Applications	Cold solder, RF shielding

LOCTITE ABLESTIK KE 4238 adhesive can be used as a "cold solder" for heat-sensitive components where hot-soldering is impractical.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Part A Properties KE4238

Specific Gravity @ 25ºC	3.02
Viscosity, Brookfield - RVF, 25 °C, mPa·s (cP):	
Spindle 5, speed 4 rpm	Paste
Shelf Life @ 25ºC , days	365

Part B Properties HD3475

Specific Gravity @ 25ºC	1.1
Viscosity, Brookfield - RVF, 25 °C, mPa·s (cP):	
Spindle 5, speed 4 rpm	7,000
Shelf Life @ 25ºC , days	365

Mixed Properties

Mixed Viscosity, mPa·s (cP) @ 25ºC	Paste
Pot Life, 20 gm mass, @ 25ºC, minutes	35

TYPICAL CURING PERFORMANCE

Recommended Curing Conditions

2 hours @ 60 °C (Recommended cure)

24 hours @ 25 °C (Alternate cure)

The above cure profiles are guideline recommendations. Cure conditions (time and temperature) may vary based on customers' experience and their application requirements, as well as customer curing equipment, oven loading and actual oven temperatures.

TYPICAL PROPERTIES OF CURED MATERIAL

Physical Properties

Density, ASTM D792, g/cm³	2.91
Thermal Conductivity , ASTM D1674, W/(m-K)	21
Flammability, ASTM D635	Pass

Electrical Properties

Volume Resistivity @ 25ºC, ohm-cm	0.01

TYPICAL PERFORMANCE OF CURED MATERIAL

Tensile Lap Shear Strength , ASTM D1002:

Al to Al:

Cured 2 hours @ 60ºC	N/mm²	13.1
	(psi)	(1,900)
Cured 36 hours @ 25ºC	N/mm²	9.6
	(psi)	(1,400)

GENERAL INFORMATION

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

DIRECTIONS FOR USE

1. Clean all surfaces to be bonded.
2. Mix Part A thoroughly in its container before measuring.
3. Weigh needed quantities together and mix until homogeneous.
4. Mix ratio of these material is set by their chemistry. Any attempt to change cure rate by changing the mix ratio will result in degraded properties.
5. Apply product.
6. If crystals form on standing, redissolve by heating to 60°C for 2 hours in 1pound mass.

Storage

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

Optimal Storage : 25 °C

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
N x 0.225 = lb
N/mm x 5.71 = lb/in
N/mm² x 145 = psi
MPa = N/mm²
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

Disclaimer

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Reference 0.1