Technical Data Sheet

LOCTITE ABLESTIK 104 MOD2

April 2018

PRODUCT DESCRIPTION

LOCTITE ABLESTIK 104 MOD2 provides the following product characteristics:

Technology	Epoxy
Appearance - Part A	Black
Appearance - Part B	White powder
Components	Two components - requires mixing
Mix Ratio by weight: Part A: Part B	100 : 64
Operating Temperature	up to 230ºC
Cure	Heat cure
Application	Component assembly, NCA
Key Substrates	• Aluminum • Stainless steel • Carbon steel • Brass • Ceramics • Glass • Thermoset plastic

LOCTITE ABLESTIK 104 MOD2 contains no solvents or volatile matter and is suitable for bonding a wide variety of porous or non-porous materials. It may be used at temperatures up to 290°C for short periods or intermittent use.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Mixed Properties Part A + Part B

Viscosity @ 25 °C, mPa·s (cP):	
Speed 1 rpm	300,000
Speed 10 rpm	90,000
Density, g/cm³	1.5
Shelf Life @ 25°C, days	180
Pot Life @ 25ºC, hours	12
Flash Point - See SDS	

TYPICAL CURING PERFORMANCE

Cure Schedule

6 hours @ 120°C
3 hours @ 150°C
2 hours @ 180°C
1 hour @ 200°C

For optimum performance at temperatures above 205°C a post cure of 12 hours at 260°C is recommended.

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 :

Coefficient of Linear Thermal Expansion , K^{-1}	10×10^{-6}
Heat Distortion Temperature, ºC	260

Electrical Properties:

Dielectric Strength, kV/mm	15.6
Volume Resistivity, ohm-cm:	
@ 25°C	10^{15}
@ 180°C	10^{13}

Chemical Resistance:

Typical Solvent and Chemical Resistance % Weight Change
After 7 days Immersion @ 24ºC

Chemical	% Weight Change	Chemical	% Weight Change
30 % H2SO4	+ 0,19	10 % NaCl	+ 0,21
3 % H2S04	+ 0,26	5 % Phenol	+ 0,23
10 % NaOH	+ 0,11	Distilled H20	+ 0,20
1 % NaOH	+ 0,22	10 % HNO3	+ 0,23
95 % C2H5OH	+ 0,7	10 % HCl	+ 0,22
50 % C2H5OH	+ 0,18	5 % CH3COOH	+ 0,24
Acetone	+ 0,06	10 % NH4OH	+ 0,76
Ethyl Acetate	+ 0,00	2 % Na2CO3	+ 0,22
CCl4	+ 0,04	3 % H2O2	+ 0,23
Toluene	+ 0,04	10 % Citric Acid	+ 0,22
Heptane	+ 0,02	Oleic Acid	+ 0,09
JP-4	0	JP-5	0

TYPICAL PERFORMANCE OF CURED MATERIAL

Lap Shear Strength , Al to Al, MPa:

@25°C	17
@150°C	12
@230°C	6.8
@290°C	0.3

GENERAL INFORMATION

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

DIRECTIONS FOR USE

1. Clean all surfaces to be bonded.
2. Roughening with emery paper and a wash with acetone or methyl ethyl ketone is recommended for optimum adhesion.
3. Apply the prepared LOCTITE ABLESTIK 104 MOD2 to both surfaces - join them and squeeze out excess material.
4. Only contact pressure is required.

STORAGE

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

Maximum 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
psi x 145 = N/mm²
MPa = N/mm²
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

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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