Technical Data Sheet

LOCTITE ABLESTIK NCA 2372

April 2021

PRODUCT DESCRIPTION

LOCTITE ABLESTIK NCA 2372 provides the following product characteristics:

Technology	Epoxy hybrid
Appearance	Black liquid
Product Benefits	• One component • Non-conductive • Low temperature cure • Well control RBO • Good adhesion • High elongation • Low modulus
Cure	Heat cure
Application	Component assembly, NCA (Non Conductive Adhesive)
Typical Assembly Applications	Optical sensor and Camera module assembly

LOCTITE ABLESTIK NCA 2372 is designed for heat sensitive applications requiring a low cure temperature. It is a one part adhesive formulated to provide good adhesion when used on a wide range of materials. This product is particularly suited where low curing temperatures are required for heat sensitive components.

LOCTITE ABLESTIK NCA 2372 is designed for bonding materials with mismatched coefficients of thermal expansion.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Viscosity, Brookfield CP51, 25 °C, mPa·s (cP):	
Speed 5 rpm	18,000
Thixotropic Index (0.5/5 rpm)	4.4
Work Life @ 25°C, days	3
Shelf Life @ -20°C, days	180
Flash Point - See SDS	

TYPICAL CURING PERFORMANCE

Recommended Heat Cure Schedule

30 minutes @ 80°C in Conventional oven

With all curing systems, the time required for cure depends on the rate of heating. Cure rate depends on the mass of material to be heated and intimate contact with the heat source. Use suggested cure conditions as general guidelines. Other cure conditions may yield satisfactory results.

Weight Loss

Weight Loss on Cure, %:	
Sample cured 30 mins @ 80ºC	0.1

Shrinkage on Cure

Cure Shrinkage, %	2.5

The above cure profile is a guideline recommendation. These cure conditions (time and temperature) may vary based on customers' experience and specific application requirements, as well as customer curing equipment, oven loading and actual oven temperatures.

TYPICAL PROPERTIES OF CURED MATERIAL

Sample cured 30 minutes @ 80°C.

Physical Properties

Hardness, Shore D	65
Glass Transition Temperature (Tg) by TMA, Filmtension, °C	27
Coefficient of Thermal Expansion, ppm/°C:	
Below Tg	56
Above Tg	159
Storage Modulus, DMTA, 1 Hz, MPa	320
Elongation @ break by Texture, %	70

TYPICAL PERFORMANCE OF CURED MATERIAL

Sample cured 30 minutes @ 80°C.

Shear Strength

Die Shear Strength, 2 x 2 mm Si die, kg/die:	
Post Cure:	
on LCP	9.3
on EMC	12.7
on PCB	12.6
on PA 9T	12.8
After 120 hours @ 85ºC/85% RH:	
on LCP	7.8
on EMC	10.2
on PCB	12.9
on PA 9T	11.6

GENERAL INFORMATION

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

Directions for Use

1. Complete cleaning of the substrates should be performed to remove contamination such as oxide layers, dust, moisture, salt and oils which can cause poor adhesion or corrosion in a bonded part.
2. Usable shelf life may vary depending on method of application and storage conditions.
3. Please contact your Henkel Technical Service representative for details on directions for use regarding

your specific application.

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

Optimal Storage: -20°C. Storage below -25°C or greater than -15°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
N x 0.225 = lb/F
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

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

Disclaimer
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. Any liability in respect of the information in the Technical Data Sheet or any other written or oral recommendation(s) regarding the concerned product is excluded, except if otherwise explicitly agreed and except in relation to death or personal injury caused by our negligence and any liability under any applicable mandatory product liability law.

In case products are delivered by Henkel Belgium NV, Henkel Electronic Materials NV, Henkel Nederland BV, Henkel Technologies France SAS and Henkel France SA please additionally note the following:
In case Henkel would be nevertheless held liable, on whatever legal ground, Henkel's liability will in no event exceed the amount of the concerned delivery.

In case products are delivered by Henkel Colombiana, S.A.S. the following disclaimer is applicable:
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. 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.
Any liability in respect of the information in the Technical Data Sheet or any other written or oral recommendation(s) regarding the concerned product is excluded, except if otherwise explicitly agreed and except in relation to death or personal injury caused by our negligence and any liability under any applicable mandatory product liability law.

In case products are delivered by Henkel Corporation, or Henkel Canada Corporation, the following disclaimer is applicable:
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.

Trademark usage

Reference 1