

**LOCTITE® ABLESTIK NCA 2050**

November 2021

**PRODUCT DESCRIPTION**

LOCTITE® ABLESTIK NCA 2050 provides the following product characteristics:

<b>Technology</b>	Acrylate
<b>Appearance</b>	Pink liquid
<b>Product Benefits</b>	<ul style="list-style-type: none"> <li>• One component</li> <li>• Good impact resistance</li> <li>• Good adhesion to various substrates</li> </ul>
<b>Cure</b>	Ultraviolet (UV) light, Visible light
<b>Application</b>	Electronic Adhesives & Solder, Component assembly

LOCTITE® ABLESTIK NCA 2050 one part, UV cure adhesive is specially formulated to provide excellent adhesion to a wide variety of substrates including glass, most metals and plastics.

**TYPICAL PROPERTIES OF UNCURED MATERIAL**

Viscosity, Brookfield CP51, 25 °C, mPa·s (cP):  
 Speed 5.0 rpm 6,400  
 Thixotropic Index (0.5/5.0 rpm) 5.3

**TYPICAL CURING PERFORMANCE****Recommended Cure Condition****UV Light**

UV Wavelength, nm 285 to 405  
 Light Intensity, mW/cm<sup>2</sup> 1,000  
 Exposure Time, seconds >10

Cure rate and depth of cure depends both on external factors including the type of light source, light intensity and exposure time, and on internal factors including composition of the adhesive.

The above cure profile is a guideline recommendation. Cure rate and ultimate depth of cure depend on light intensity, spectral distribution of light source, exposure time and the light transmittance of the substrate.

**TYPICAL PROPERTIES OF CURED MATERIAL****Physical Properties**

Sample cured UV 365 nm, UV intensity 10,000 mJ/cm<sup>2</sup>.

Hardness, Shore D 36  
 Glass Transition Temperature, (Tg) by TMA, °C 43  
 Coefficient of Thermal Expansion :  
 Below Tg, ppm 130  
 Above Tg, ppm 257  
 Elongation @ break, % 230  
 Storage Modulus @ 25°C, DMA, N/mm<sup>2</sup> 484  
 Moisture Absorption, % 4.8  
 Volume Shrinkage, % 6.6

**Adhesion Properties**

Sample cured UV 365 nm, UV intensity 10,000 mJ/cm<sup>2</sup>.  
 Adhesion Strength, Fr5 substrate, kg-f 12.2

**GENERAL INFORMATION**

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

**THAWING: (if applicable)**

1. Safe yellow light is recommended for visible light initiated grades during handling prior to curing. Dimmed light may be used if adhesive is only being handled for short periods of time.
2. Allow container to reach room temperature before use.
3. After removing from the freezer, set the syringes to stand vertically while thawing.
4. DO NOT open the container before contents reach 25 °C temperature. Any moisture that collects on the warmed up container should be removed prior to opening the container.
5. DO NOT re-freeze. Once thawed, the adhesive should not be re-frozen.

**Directions for Use**

1. Thawed material should immediately be placed on dispense equipment for use.
2. If the adhesive is transferred to a final dispensing reservoir, care must be exercised to avoid entrapment of contaminants and/or air into the adhesive..
3. Adhesive must be completely used within the product's recommended work life.
4. This product is light sensitive; exposure to daylight, UV light or artificial lighting should be kept to a minimum during storage and handling.



**STORAGE**

Store in original, tightly covered containers in clean, dry areas. Storage information may be indicated on the product container labeling.

**Optimal Storage: 2 to 8°C. Storage below 2°C or above 8°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.

**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.

**Conversions**

$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$   
 $\text{kV/mm} \times 25.4 = \text{V/mil}$   
 $\text{mm} / 25.4 = \text{inches}$   
 $\text{N} \times 0.225 = \text{lb/F}$   
 $\text{N/mm} \times 5.71 = \text{lb/in}$   
 $\text{psi} \times 145 = \text{N/mm}^2$   
 $\text{MPa} = \text{N/mm}^2$   
 $\text{N}\cdot\text{m} \times 8.851 = \text{lb}\cdot\text{in}$   
 $\text{N}\cdot\text{m} \times 0.738 = \text{lb}\cdot\text{ft}$   
 $\text{N}\cdot\text{mm} \times 0.142 = \text{oz}\cdot\text{in}$   
 $\text{mPa}\cdot\text{s} = \text{cP}$

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## Reference 1