

## LOCTITE® NCI 8002

April 2024

### PRODUCT DESCRIPTION

LOCTITE® NCI 8002 provides the following product characteristics:

Technology	Thermoplastic
Appearance	White
Operating temperature	60°C
Cure	Heat drying
Application	Non-Electrically Conductive Ink; Inks and Coatings
Typical assembly applications	PTC heating elements
Product benefits	<ul style="list-style-type: none"><li>• Non-conductive</li><li>• Screen printable</li></ul>

LOCTITE® NCI 8002 screen printable ink is specifically designed for blending with LOCTITE® ECI 8001 and LOCTITE® ECI 8060HV printable ink to provide a range of resistance values.

### TYPICAL PROPERTIES OF UNDRIED MATERIAL

Solids content, %	45.5
Viscosity, Rheometer, mPa.s (cP)	
Shear rate 15 s <sup>-1</sup>	4,000
Shelf life @ 0 to 8°C, days	365
From date of manufacture in original seal	

### TYPICAL SCREEN PRINTING PROCESS

Blends of LOCTITE® NCI 8002 and LOCTITE® ECI 8001 and LOCTITE® ECI 8060HV are applied by standard screen printing techniques.

#### Printing equipment type

- Manual
- Semi-automatic
- High speed reel to reel

### TYPICAL DRYING PERFORMANCE

#### Recommended drying conditions

10 minutes @ 120°C

Blends of LOCTITE® NCI 8002 and LOCTITE® ECI 8060HV and LOCTITE® ECI 8001 can be dried in conventional air circulated ovens.

The above drying profile is a guideline recommendation. Conditions (time and temperature) may vary based on customers' experience and their application requirements, as well as customer drying equipment, oven loading and actual oven temperatures.

### GENERAL INFORMATION

Please consult the Safety Data Sheet (SDS) for safe handling information of this product.

#### Directions for use:

1. This material is supplied ready to use. Should thinning become necessary, use 2-butoxy ethyl acetate (CAS Number 112-07-2).
2. If a gel structure forms after extended storage, the product may be warmed slightly in a water bath (not exceeding 50°C) and stirred. Very often, stirring is enough to obtain proper viscosity again.

#### Mixing recommendations:

1. Add the required amount of LOCTITE® ECI 8001 or LOCTITE® ECI 8060HV with the LOCTITE® NCI 8002 to obtain the required resistance level.
2. Stir for at least 5 minutes using a mechanical propeller stirrer. Do not use a dispersion blade to stir. Adjust the speed to get all the material in movement but avoid stirring too fast (no vortex). Avoid air introduction or heating the ink above 30°C.
3. The temperature during the preparation of the blend shall not exceed 30°C.
4. If the final resistance is too low, use additional LOCTITE® NCI 8002 to increase the resistivity of the mix. In the contrary, add LOCTITE® ECI 8001 or LOCTITE® ECI 8060HV if the final resistance is too high.

#### Clean up

To clean screen and equipment, use Methyl ethyl ketone (MEK), acetone or similar solvents.

#### Storage

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

**Optimal Storage: 0 to 8°C. Storage below 0°C or greater than 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 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 quality department for assistance and recommendations on the specifications of this product.

**Conversions**

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

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