

# LOCTITE ECCOBOND DS 7301NS

January 2022

## PRODUCT DESCRIPTION

LOCTITE ECCOBOND DS 7301NS provides the following product characteristics:

<b>Technology</b>	Epoxy
<b>Appearance</b>	Gray
<b>Product Benefits</b>	<ul style="list-style-type: none"><li>• One component</li><li>• Non-conductive</li><li>• Fast cure at low temperatures</li><li>• Good resistance to water permeation</li></ul>
<b>Cure</b>	Heat cure
<b>Application</b>	Structural adhesive, Electronic structural bonding, Display module assembly, Electronic Adhesives & Solder
<b>Typical Assembly Applications</b>	OLED displays

LOCTITE ECCOBOND DS 7301NS adhesive sealant is designed for display assembly applications that require protection against humidity and oxygen.

## TYPICAL PROPERTIES OF UNCURED MATERIAL

Viscosity, Cone & Plate, @ 25 °C mPa·s (cP):  
@ Speed 5 rpm 340  
Pot Life @ 25°C, hours 8  
Shelf Life @ -40°C, days 90

## TYPICAL CURING PERFORMANCE

### Cure Schedule (Actual Bondline temperature)

>90minutes @ 70°C or  
>60minutes @ 80°C

Time shown does not include ramp-up time to cure temperature.

The above cure profiles are guideline recommendations. 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

### Physical Properties

Hardness, Shore D 81  
Glass Transition Temperature (Tg) by TMA, °C 72

Coefficient of Thermal Expansion, , ppm/°C:

Above Tg 45  
Below Tg 150

Water Vapor Permeability Coefficient , g.mil/100 in<sup>2</sup> .day:  
50°C/100% RH 9

## Adhesion Properties

Die Shear Strength :  
4 x 4 mm, Glass on PET, kg-f 42

## GENERAL INFORMATION

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

## THAWING:

1. Allow container to reach room temperature before use.
2. After removing from the freezer, set the syringes to stand vertically while thawing.
3. Any moisture that collects on the thawed package should be removed prior to opening the package.

## DIRECTIONS FOR USE

1. The surfaces on which the adhesive has to be applied should be clean, dry and free from all dust.
2. Due to the nature of the product, heating of the syringe or the surface during dispensing is not advised as this will cause the product to start to cure.

## STORAGE

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

**Optimal Storage: -40°C. Storage below -40°C or above -40°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**

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

**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.

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## Reference 1