

**LOCTITE ECCOBOND DS 3318LV**

November 2016

**PRODUCT DESCRIPTION**

LOCTITE ECCOBOND DS 3318LV provides the following product characteristics:

<b>Technology</b>	Acrylic
<b>Appearance</b>	Light yellow, transparent liquid
<b>Components</b>	One-component
<b>Product Benefits</b>	<ul style="list-style-type: none"> <li>• Fast cure</li> <li>• Low energy cure</li> <li>• Good moisture resistance</li> <li>• High flexibility</li> </ul>
<b>Cure</b>	Ultraviolet (UV)/ visible light, UV LED
<b>Application</b>	Coating and Sealant
<b>Typical Package Application</b>	LCD module assembly

LOCTITE ECCOBOND DS 3318LV is suitable for a wide variety of coating applications that require strict humidity reliability performance, such as ITO/COG overcoat in LCD module assembly.

**TYPICAL PROPERTIES OF UNCURED MATERIAL**

Viscosity @ 25 °C, mPa·s (cP)	968
Specific Gravity	0.97
Shelf Life @ 25°C, months	12
Flash Point - See SDS	

**TYPICAL CURING PERFORMANCE****Recommended UV Cure**

Ultraviolet (UV), Visible light or UV LED

Light Source and Condition:

High pressure mercury lamp

Irradiance, mW/cm<sup>2</sup> 100

**Tack Free Time**

Time required to achieve tack-free surface, seconds 3

**Depth of Cure**

LOCTITE ECCOBOND DS 3318LV can be cured by irradiation with ultraviolet and visible light as well as LED-UV light with single wavelength distribution of sufficient intensity. Cure rate and depth of cure depend on the intensity, spectral distribution of the light source, exposure time and light transmittance of the substrate through which the light must pass.

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

Glass Transition Temperature, DMA, °C	64
Water Permeability, gm/mil/100 in <sup>2</sup> /day:	
24 hours, 50°C, 100% RH	21
Extractable Ionic Content, , ppm:	
Chloride (Cl-)	7.0
Sodium (Na+)	1.0
Modulus , Fusion, irradiated 4 times:	
N/mm <sup>2</sup>	504
(psi)	(73,099)

**Electrical Properties:**

Volume Resistivity , ohms-cm	4.94×10 <sup>16</sup>
------------------------------	-----------------------

**Miscellaneous:**

Tensile Strength, at break, sample cured with 2,000 mJ/cm <sup>2</sup> energy:	
N/mm <sup>2</sup>	13.3
(psi)	(1,929)

**GENERAL INFORMATION**

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

**This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be selected as a sealant for chlorine or other strong oxidizing materials.**

**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 specifications for this product.

**STORAGE:**

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

**Optimal 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**

$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$

$\text{kV/mm} \times 25.4 = \text{V/mil}$

$\text{mm} / 25.4 = \text{inches}$

$\text{N} \times 0.225 = \text{lb}$

$\text{N/mm} \times 5.71 = \text{lb/in}$

$\text{psi} \times 145 = \text{N/mm}^2$

$\text{MPa} = \text{N/mm}^2$

$\text{N}\cdot\text{m} \times 8.851 = \text{lb}\cdot\text{in}$

$\text{N}\cdot\text{m} \times 0.738 = \text{lb}\cdot\text{ft}$

$\text{N}\cdot\text{mm} \times 0.142 = \text{oz}\cdot\text{in}$

$\text{mPa}\cdot\text{s} = \text{cP}$

**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.

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, Resin Technology Group, Inc., 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:** [Except as otherwise noted] All trademarks in this document are trademarks and/or registered trademarks of Henkel and its affiliates in the U.S. and elsewhere.

Reference 1