

**Technical Data Sheet** 

LOCTITE<sup>®</sup> AA 3115™

Known as LOCTITE<sup>®</sup> 3115™ January 2015

### PRODUCT DESCRIPTION

LOCTITE<sup>®</sup> AA 3115<sup>™</sup> provides the following product characteristics:

Technology	Acrylic
Chemical Type	UV acrylic
Appearance (uncured)	Transparent liquid <sup>™s</sup>
Components	One component -
	requires no mixing
Viscosity	Medium
Cure	Ultraviolet (UV) light
Cure Benefit	Production - high speed curing
Application	Coating

LOCTITE<sup>®</sup> AA 3115<sup>™</sup> is specifically designed for rapidly producing clear, semi-flexible, tack-free coatings. Typical applications include lapel pin coating and cosmetic pencil coating.

# TYPICAL PROPERTIES OF UNCURED MATERIAL

Flash Point - See SDS

Viscosity, Brookfield - RVT, 25 °C, mPa·s (cP): Spindle 3, speed 20 rpm, 1,700 to 2,300<sup>LMS</sup>

# TYPICAL CURING PERFORMANCE

LOCTITE<sup>®</sup> AA 3115<sup>™</sup> is cured by exposure to ultraviolet light of sufficient intensity. Surface cure is enhanced by exposure to UV light in the 220 to 260 nm range. Cure rate and ultimate depth of cure depend on light intensity, spectral distribution of the light source, exposure time and light transmittance of the substrate through which the light must pass.

#### Tack Free Time

Tack Free Time is the time required to achieve a tack free surface

Tack Free Time, seconds:	
100 mW/cm <sup>2</sup> , measured @ 365 nm	≤5

# TYPICAL PROPERTIES OF CURED MATERIAL

Cured @ 100 mW/cm <sup>2</sup> , measured @ 365 nm, for	or 5 seconds
Physical Properties:	
Shara Hardnoog JSO 969 Duramatar D	EO to OALM

Shore Hardness, ISO 868, Durometer D	59 to 94 <sup>LMS</sup>
UV Depth of Cure, mm	≥3.2 <sup>LMS</sup>

# **GENERAL INFORMATION**

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.

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

#### Directions for use:

- 1. This product is light sensitive; exposure to daylight, UV light and artificial lighting should be kept to a minimum during storage and handling.
- 2. The product should be dispensed from applicators with black feedlines.
- 3. For best performance bond surfaces should be clean and free from grease.
- 4. Cure rate is dependent on lamp intensity, distance from light source, depth of cure needed or bondline gap and light transmittance of the substrate through which the radiation must pass.
- 5. Recommended intensity for cure in an adhesive application (between substrates) is 40mW/cm<sup>2</sup> minimum (measured at the bondline) with an exposure time of 5-6 times the fixture time at this same intensity.
- For tack free surface cure, as necessary in coating, potting or tacking applications, higher intensity UV is required (100mW/cm<sup>2</sup> minimum).
- 7. Cooling should be provided for temperature sensitive substrates such as thermoplastics.
- 8. Plastic grades should be checked for risk of stress cracking when exposed to liquid adhesive.
- 9. Excess uncured adhesive can be wiped away with organic solvent (e.g. Acetone).
- 10. Bonds should be allowed to cool before subjecting to any service loads.

#### Loctite Material Specification<sup>LMS</sup>

LMS dated December 28, 2000. Test reports for each batch are available for the indicated properties. LMS test reports include selected QC test parameters considered appropriate to specifications for customer use. Additionally, comprehensive controls are in place to assure product quality and consistency. Special customer specification requirements may be coordinated through Henkel Quality.



#### Storage

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

**Optimal Storage:** 8 °C to 21 °C. Storage below 8 °C or greater than 28 °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 Technical Service Center or Customer Service Representative.

#### Conversions

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

#### 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.

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Reference 1.1