

# LOCTITE 198862

October 2018

## PRODUCT DESCRIPTION

LOCTITE 198862 provides the following product characteristics:

<b>Technology</b>	Silicone
Chemical Type	Alkoxy silicone
Appearance (uncured)	Yellow to green liquid <sup>LMS</sup>
<b>Cure</b>	Ultraviolet (UV) light
Secondary Cure	Moisture for shadowed areas
Product Benefits	<ul style="list-style-type: none"> <li>Fluorescent under UV light</li> <li>One component for easy processing</li> <li>Self-leveling</li> <li>Flexible</li> <li>No corrosive by-product</li> </ul>
<b>Application</b>	Encapsulation, Conformal coating

LOCTITE 198862 is used for potting, coating and sealing of various automotive, electronic, military and industrial components. LOCTITE 198862 is a lower viscosity version of LOCTITE 5092 material.

## TYPICAL PROPERTIES OF UNCURED MATERIAL

Specific Gravity @ 25 °C	0.98
Viscosity, Brookfield - RVT,25°C,mPa·s (cP):	
Spindle 3, speed 10 rpm	1,425
Flash Point - See SDS	

## TYPICAL CURING PERFORMANCE

Normal processing conditions will include exposure to sufficient UV light irradiance to effectively cure the material. Surface and/or atmospheric moisture will promote the cure of material in shadowed regions. Although functional strength is developed almost instantly due to the UV curing nature of LOCTITE 198862, increased cure properties are developed during 72 hours at ambient conditions.

### Surface Cure

When curing with sufficient UV light irradiance, exposed material cures dry to the touch in seconds. Atmospheric moisture cures material not exposed to UV light.

### Depth of Cure

Shadowed areas rely on surface and/or atmospheric moisture to effect cure. Depth of cure is limited to approximately 1/4 inch and will take at least 24 hours to develop. Rapid, deep section cure can be attained with properly focused UV light.

## TYPICAL PROPERTIES OF CURED MATERIAL

Cured @ 70m W/cm<sup>2</sup> for 60 sec./side plus 72 hrs. @ 50 ± 5% RH & 23°C.

### Physical Properties

Hardness (Shore A)	23
Elongation, %	84

## TYPICAL PERFORMANCE OF CURED MATERIAL

Cured @ 70m W/cm<sup>2</sup> for 60 sec./side, plus 72 hrs. @ 50 ± 5% RH & 23°C.

### Miscellaneous

Tensile Strength, N/mm <sup>2</sup>	0.83
Tear Strength, Die B, N/mm <sup>2</sup>	4.64

## 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.**

Where aqueous washing systems are used to clean the surfaces before bonding, it is important to check for compatibility of the washing solution with the adhesive. In some cases these aqueous washes can affect the cure and performance of the adhesive.

### Directions for use:

- For best performance bond surfaces should be clean and free from grease and other contaminants.
- The product is designed to be initially cured with UV light at a minimum irradiance of 70 mW/cm<sup>2</sup> for approximately 20 seconds, increased exposure may be required for curing deeper sections.
- Functional strength is achieved almost instantly.
- Full performance properties will develop over 72 hours.
- Moisture curing begins immediately after the product is exposed to the atmosphere, therefore parts to be assembled should be mated within a few minutes after the product is dispensed.
- Excess material can be easily wiped away with non-polar solvents.

**Storage**

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

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

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

**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