

## LOCTITE® AA 340™

Known as LOCTITE® 340™  
January 2015

### PRODUCT DESCRIPTION

LOCTITE® AA 340™ provides the following product characteristics:

<b>Technology</b>	Acrylic
<b>Chemical Type</b>	Elastomer/methacrylate
<b>Appearance (uncured)</b>	Clear, Yellow
<b>Components</b>	One component - requires no mixing
<b>Viscosity</b>	High
<b>Cure</b>	Activator
<b>Secondary Cure</b>	Heat
<b>Application</b>	Bonding

LOCTITE® AA 340™ is a toughened acrylic adhesive intended for structural bonding of steel parts. It fixtures at room temperature with the aid of Activator 7851™, but attains full strength only when exposed to temperatures above 90 °C. It is intended for use in applications where the completed assembly is subsequently subjected to a paint bake cycle at temperatures up to 200 °C. LOCTITE® AA 340™ is suitable for bonding structural or sheet steel where some continuous or repeated loading is encountered (e.g. metal furniture, doors or vehicle bodies). It is capable of bonding through many commonly-used protective wax or oil coatings.

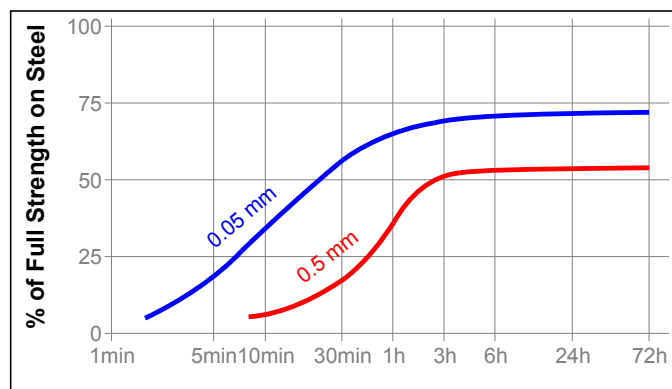
### TYPICAL PROPERTIES OF UNCURED MATERIAL

Specific Gravity @ 25 °C	0.98
Vapour Pressure, hPa	<30
Flash Point - See SDS	
Viscosity, Brookfield - RVT, 25 °C, mPa·s (cP):	
Spindle 5, speed 20 rpm	120,000 to 200,000

### TYPICAL CURING PERFORMANCE

#### Cure Speed vs. Bond Gap

The rate of cure will depend on the bondline gap. The following graph shows the shear strength developed with time on grit blasted steel lap shears at different controlled gaps and tested according to ISO 4587. (Activator 7851™ applied to one surface).



### TYPICAL PROPERTIES OF CURED MATERIAL

#### Physical Properties:

Coefficient of Thermal Expansion, ISO 11359-2, K <sup>-1</sup>	100×10 <sup>-6</sup>
Coefficient of Thermal Conductivity, ISO 8302, W/(m·K)	0.1
Specific Heat, kJ/(kg·K)	0.3

### TYPICAL PERFORMANCE OF CURED MATERIAL

#### Adhesive Properties

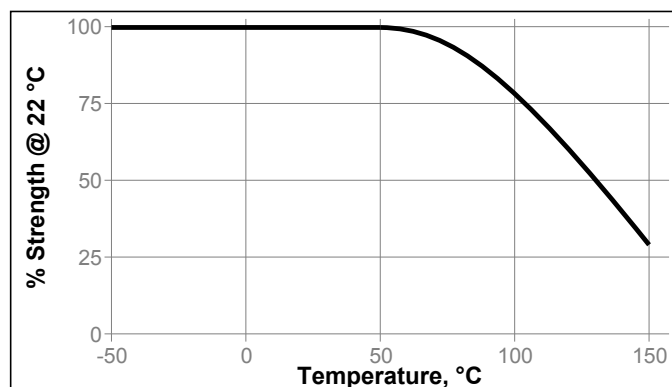
Cured for 24 hours @ 22 °C followed by 30 minutes @ 185 °C, Activator 7851™ on one side	
Lap Shear Strength, ISO 4587:	
Steel (degreased)	N/mm <sup>2</sup> 6 to 16 (psi) (870 to 2,320)

### TYPICAL ENVIRONMENTAL RESISTANCE

Cured for 30 minutes @ 185 °C, Activator 7851™ on one side.	
Lap Shear Strength, ISO 4587:	
Steel (grit blasted)	

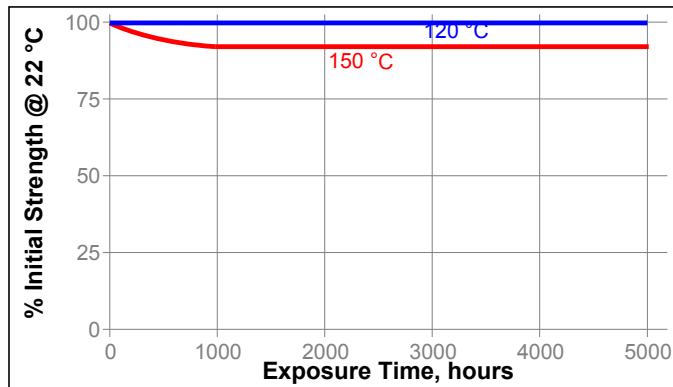
### Hot Strength

Tested at temperature



**Heat Aging**

Aged at temperature indicated and tested @ 22 °C

**Chemical/Solvent Resistance**

Aged under conditions indicated and tested @ 22 °C.

Environment	°C	% of initial strength
		336 h
Motor oil	80	80
Gasoline	22	30
Brake fluid	22	100
95% RH	40	100

**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).**

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.

This product is not normally recommended for use on plastics (particularly thermoplastic materials where stress cracking of the plastic could result). Users are recommended to confirm compatibility of the product with such substrates.

**Directions for use:**

1. For best performance bond surfaces should be clean and free from grease.
2. To ensure a fast and reliable cure, activator should be applied to one of the bond surfaces and the adhesive to the other surface.
3. The recommended bondline gap is 0.05 mm. Where bond gaps are large (up to a maximum of 1.0 mm), or faster cure speed is required, Activator 7851™ should be applied to both surfaces. Parts should be assembled immediately (within 1 minute).
4. Parts should be assembled immediately (within 15 minutes).
5. Excess adhesive can be wiped away with organic solvent.
6. Bond should be held clamped until adhesive has fixtured.
7. Product should be allowed to develop full strength before subjecting to any service loads (typically 24 to 72 hours

after assembly, depending on bond gap, materials and ambient conditions).

**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: 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**

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

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

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

$$\mu\text{m} / 25.4 = \text{mil}$$

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

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

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

$$\text{MPa} \times 145 = \text{psi}$$

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

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

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

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

**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 1.1