

**LOCTITE® EA 3501HT**

September 2020

**PRODUCT DESCRIPTION**

LOCTITE® EA 3501HT provides the following product characteristics:

<b>Technology</b>	Epoxy
<b>Chemical Type</b>	Epoxy
<b>Appearance</b>	Grey paste
<b>Components</b>	One component - requires no mixing
<b>Viscosity</b>	High
<b>Cure</b>	Heat cure
<b>Application</b>	Seam sealing

LOCTITE® EA 3501HT is a one component, heat curing epoxy seam sealant designed for use on primed or bare, oily metal in preparation for high temperature paint bake processing which includes metal pre-treatment, e-coat/primer paint and powder/top-coat stages. This material is compatible with most metal pre-treatment processes and is formulated to maintain its physical properties and performance even after paint bake processes reaching 225°C.

LOCTITE® EA 3501HT is flexible and suitable for use on wide a range of substrate gauges ranging from thin sheet metals to rigid castings and extrusions.

Typical applications include sealing of metal seams between welded/bonded joints, overlap joints, butt joints, and any other visible seam which requires sealing.

**TYPICAL PROPERTIES OF UNCURED MATERIAL**

Specific Gravity @ 23°C, ASTM D927	1.35
Viscosity @ 25 °C, mPa·s (cP):	
CP25-2, oscillation	480,000
Solids Content, ASTM D2834, %	100
Sag Resistance, SAE J243, mm:	
Vertical Sag Method B	0
Horizontal Sag Method B	0

**TYPICAL CURING PERFORMANCE****Cure Cycle**

Typical Cure @ 175°C, minutes	30
Max Cure @ 225°C, minutes	30
Min Cure @ 160°C, minutes	30

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

Shore Hardness, Durometer A	75
Low Temp Mandrel Bend @ -40°C, (SAE J1243 Method B (50mm diameter))	No cracking or adhesion loss

**Adhesive Properties**

Substrate Adhesion, Bead-knife, %:	
Oily bare steel 10W-30, Epoxy primer paint	>95
Epoxy Primer Valspar, EEY0148/CEC0120, %:	
Initial	>95

**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.**

**Directions for use**

1. This product is not frost sensitive.
2. Remove product from refrigeration and allow to reach ambient temperature before use.

**Storage**

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

**Optimal Storage: 2 to 25°C . Storage below 2°C or above 25°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.

**Product Specification**

The technical data contained herein are intended as reference only and are not considered specifications for the product. Product specifications are located on the Certificate of Analysis or please contact Henkel representative.

**Approval and Certificate**

Please contact Henkel representative for related approval or certificate of this product.

**Data Ranges**

The data contained herein may be reported as a typical value. Values are based on actual test data and are verified on a periodic basis.

Temperature/Humidity Ranges: 23°C / 50% RH = 23±2°C / 50±5% RH

**Conversions**

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

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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.

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**Reference 1**