



## High Temperature Nacelle Film Adhesives

### LOCTITE® EA 9658 AERO\*

For excellent high temperature strength and long term thermal durability. Suitable for metal, composite and honeycomb bonding where continuous exposure to temperatures up to 350 °F / 177 °C is important.

#### Application:

- Nacelle metal & composite bonding

#### Attributes & Features:

- Film adhesive available as unsupported or supported versions
- Increased open time assembly / handling performance
- Adhesive cure 350 °F / 177 °C
- High glass transition temperature (Tg) performance
- Excellent flow control to minimize hole blockage & excess flash / flow
- Reticulation capability
- Increased toughness with high temperature performance
- Thermally stable out to 6000 hours at 350 °F / 177 °C
- Thermally compatible with LOCTITE® EA 9258.1 AERO low VOC waterbase primer
- 35% weight reduction with low weight product version

## LOCTITE® EA 9658 AERO • Applications

### Storage Life

- Requires refrigerated storage.
- Store @ 0 °F / -18 °C or below for maximum storage life.
- Warranty life @ 0 °F / -18 °C is 9 months from date of shipment.
- Store only in sealed containers to prevent moisture contamination.
- Allow all moisture to evaporate from container before opening for use.

### Applying

- Bonding surfaces should be clean, dry and properly prepared. For optimum surface preparation consult the Hysol® Surface Preparation Guide.
- The adhesive film, with one liner left on it, may be tacked to the detail part for cutting to shape and size.
- The liner should remain with the adhesive until just before assembly of the detail to the other faying surface. This will minimize contamination of the adhesive bond.
- The bonded parts should be held in contact until the adhesive has cured. Usually 25 to 50 psi / 1.2 to 2.4 kPa is sufficient to assure proper mating.

### Open Assembly Time

LOCTITE® EA 9658 AERO may be used within the following schedule after removing from cold storage:

- @ 77 °F / 25 °C at least 15 days
- @ 90 °F / 32 °C at least 10 days

### Curing

LOCTITE® EA 9658 AERO may be cured for 1 hour @ 350 °F / 177 °C. Heat up rate to the cure temperature is not critical, but should be between 4° and 7 °F (2.2° and 4°C) per minute. Pressure should be applied before heating the parts to be bonded and maintained until cool down of the assembly.

### Cleanup

- It is important to remove excess adhesive from the part and bonding tools before it hardens. Once the adhesive is cured, it is difficult to remove except by mechanical abrasion.
- Uncured adhesive may be removed with a ketone solvent in a well-ventilated area.
- Saturate a clean cloth or industrial wiper with solvent and apply just enough to do the job.
- Be careful to prevent any solvent from entering the uncured bondline, as solvent will degrade the final bond performance.
- Consult with your supplier's information pertaining to the safe and proper use of solvents.

## LOCTITE® EA 9658 AERO • Configurations

<b>Packaging Configurations Offered</b>	36IN X 150FT 450SF EA 9658 .060 PSF UNS EA 9658 .065 PSF NWG* EA 9658 .100 PSF NWG	<b>Open Time Assembly</b>	15 days @ 77 °F / 25 °C 10 days @ 90 °F / 32 °C
		<b>Cured Density, g/cm<sup>3</sup> (pcf)</b>	0.72 (45)
<b>Storage Temperature</b>	≤0 °F / ≤ -18 °C	<b>Warranty Life</b>	9 months

UNS = unsupported adhesive, no fabric  
NWG = supported adhesive, non-woven glass fabric

\* EA 9658.065 PSF NWG is low weight version of EA 9658.100 NWG for nacelle bonding on e.g. 787-9.

**NORTH AMERICA**  
**Henkel Corporation Aerospace**  
P.O. Box 312,  
2850 Willow Pass Road  
Bay Point, CA 94565 /  
United States  
Tel.: +1 925 458 8000  
Fax: +1 925 458 8030

**EUROPE**  
**Henkel**  
82, Rue de Maubec  
31300 Toulouse / France  
Tel.: +33 5 34 36 40 60  
Fax: +33 5 34 36 40 69

**ASIA**  
**Henkel (China)**  
**Investment Co. Ltd**  
No. 928 Zhang Heng Road,  
Pu Dong, 201203 Shanghai /  
China  
Tel.: +86 21 2891 8000  
Fax: +86 21 2891 8971

**LATIN AMERICA**  
**Henkel Brazil Ltda**  
Rua Karl Huller, 136  
Diadema – SP  
Brazil, 09941-410  
Tel.: +55 11 3205 8955

[www.henkel.com/aerospace](http://www.henkel.com/aerospace)

The data contained herein are intended as reference only. Please contact Henkel Technical Support Group for assistance and recommendation on specifications for these products.

® designates a trademark of Henkel AG & Co. KGaA or its affiliates, registered in Germany and elsewhere © Henkel AG & Co. KGaA, 2013

