

# LOCTITE EF 557 AERO

## Foaming Core Splice Adhesive

(KNOWN AS Hysol MA 557)

### INTRODUCTION

LOCTITE EF 557 AERO is a modified epoxy foaming adhesive that may be cured at 250°F (121°C) or 350°F (177°C). It is designed to seal, splice or reinforce honeycomb materials.

### FEATURES

- Non-asbestos
- Dual temperature curing 250°F (121°C) or 350°F (177°C)
- Excellent resistance to Skydrol, penetrating oils and detergents
- Good slump resistance

Typical Technical Data	LOCTITE EF 557 AERO
Type:	Unsupported expandable epoxy film adhesive
Color:	Black
Volatiles:	0.14%
Thickness:	0.050" (1.33mm), 0.100" (25mm)
Form:	Sheets 1'x2" (0.3m x0.61m)
Slump:	0.04" (1mm)
Cured Density:	Average of 31.8 lb/ft <sup>3</sup> (0.51g/cc)
Expansion Rate:	2.38 times original thickness
Shelf Life:	6 months @ 0°F (-18°C)
Out Time:	10 days @ 77°F (25°C)

### Application Method

Remove adhesive material from cold storage and allow to warm-up to room temperature before use. Keep material wrapped to prevent moisture from condensing on the adhesive. Be sure parts to be bonded have been thoroughly cleaned and dried before bonding.

Cut adhesive to part size, remove the paper separator and apply to edge of honeycomb core. Remove the other paper separator and join to the other section of core or edge member. Cure at 250°F (121°C) or 350°F (177°C).

**Curing Conditions:** 60 minutes @ 250°F (121°C) or 350°F (177°C)

**Clean-up:** Uncured adhesive may be removed effectively with ketone solvents in well-ventilated areas. Avoid contaminating uncured parts. Consult solvent container label/MSDS for proper safety and handling procedures.

**Storage:** The shelf life of LOCTITE EF 557 AERO is 6 months at 0°F (-18°C). This product has an out time of 10 days @ 77°F (25°C).

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**Performance Properties**  
**Tube Shear Strength<sup>1</sup>**

Test Temperature		Cured 60 Minutes @		Cured 60 Minutes @	
		250°F	121°C	350°F	177°C
°F	°C	psi	MPa	psi	MPa
75	24	1191	8.2	940	6.5
250	121	1063	7.3	720	5.0

**Flexural Strength<sup>1</sup>**

Test Temperature		Cured 60 Minutes @		Cured 60 Minutes @	
		250°F	121°C	350°F	177°C
°F	°C	psi	MPa	psi	MPa
75	24	900	6.2	850	5.9
350	177	-	-	380	2.6

1. LOCTITE EF 557 AERO .050" (1.33mm) thick 2 1/8" core (3.2mm), 0.002" foil (.05mm), 2" thick (12.7mm)

**Handling Precautions**

Do not handle or use until the Material Safety Data Sheet has been read and understood. For industrial use only.

**DISPOSAL INFORMATION**

Dispose of spent remover and paint residue per local, state and regional regulations. Refer to HENKEL TECHNOLOGIES MATERIAL SAFETY DATA SHEET for additional disposal information.

**PRECAUTIONARY INFORMATION****General:**

As with most epoxy based systems, use this product with adequate ventilation. Do not get in eyes or on skin. Avoid breathing the vapors. Wash thoroughly with soap and water after handling.

Before using this product refer to container label and HENKEL TECHNOLOGIES MATERIAL SAFETY DATA SHEET for additional precautionary, handling and first aid information.



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