

LOCTITE EA 460 AEROFoaming Core Splice Adhesive

(KNOWN AS Hysol PL 460)

INTRODUCTION

LOCTITE EA 460 AERO is a foaming epoxy adhesive in paste form for easy extrusion through packaged cartridges. The adhesive expands and cures at temperatures from 250°F (121°C) to 350°F (177°C).

FEATURES

- Qualified to Boeing BMS 5-90, Type IV
- 30 day out time at 77°F (25°C)
- Closed cell expanding technology
- Resistance to sagging during cure
- Structural properties of a core splice film in paste form

USES

- Splicing honeycomb core edge closeouts
- Core fill

Typical Technical Data	LOCTITE EA 460 AERO
Type:	Modified Epoxy Paste
Form:	Available in 6 oz cartridges
Color:	Light Tan
Thickness:	0.050" ± 0.005" (1.27 ± 0.0127 cm)
Uncured Density:	58 lbs/ ft ³ (0.93 g/cc)
Volatiles:	0.76 % (2 hrs. at 217°F/103°C)
Weight:	.3 psf (1464 g/m²)
Tg (DSC):	266°F (130°C)
Out Time:	30 days @ 77°F (25°C)
Shelf Life:	12 months @ 0°F (-18°C)

Performance Properties

Tube Shear Strength: 40-43 grams cured in 9" (23 cm) tube at 250°F (121°C) or 350°F (177°C).

Test Temp	Cured @ 250°F (121°C)	Cured @ 350°F (177°C)
-67°F (-55°C)	1750 psi <i>(12.1 MPa)</i>	2960 psi <i>(20.4 MPa)</i>
75°F (24°C)	1510 psi <i>(10.4 MPa)</i>	1682 psi <i>(11.6 MPa)</i>
250°F (121°C)	1170 psi <i>(8.1 MPa)</i>	
350°F (177°C)	· · · · · · · · · · · · · · · · · · ·	250 psi <i>(1.7 MPa)</i>

Typical technical data and performance properties given for reference only. Not for specification purposes.





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Application Method

Allow product to warm to 75°F (24°C). If packaged in tubes, choose appropriate applicator nozzle. Apply to core for core fill, core splicing, or edge close out applications. Partially used containers may be returned to cold storage for reuse.

Cure

Expansion, Ratio Sag	77-250°F (25-121°C) 3.8°F (6°C)/min. rise 2.1 0.15" (0.381 cm)	77-350°F (25-177°C) 9.0°F (16°C)/min. rise 3.0 0.27" (0.69 cm)
Exotherm Cured Density	77-250°F (25-121°C) 3.8°F (6°C)/min. rise 26.3 lbs/ft³ (0.42 g/cc)	77-350°F (25-177°C) 9.0°F (16°C)/min. rise 464°F (240°C) 20.5 lbs/ft³ (0.33 g/cc)

Recommended Cure: 90' @ 250°F (121°C) or 60' @ 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

LOCTITE EA 460 AERO has a shelf life of 12 months @ 0°F (-18°C). The product has an out time of 30 days @ 77°F (25°C).

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.



Technical Process Bulletin

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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.

Note

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Rev. 9/2013

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