



Hysol® MA 557

Foaming Core Splice Adhesive

Henkel Corporation
Aerospace



Authorized Distributor

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Description

Hysol® MA 557 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	Hysol® MA 557
Type:	Unsupported expandable epoxy film adhesive
Color:	Black
Volatiles:	.14%
Thickness:	0.025" (.64mm), 0.050" (1.33mm), 0.100" (25mm)
Form:	Up to 48" wide (1.22m) rolls or sheets 1'x2" (.3m x .61m)
Slump:	.04" (1mm)
Cured Density:	Average of 31.8 lb/ft ³ (.51g/cc)
Expansion Rate:	2.38 times original thickness
Shelf Life:	6 months @ 0°F (-18°C), 2 months @ 40°F (4.4°C)
Out Time:	10 days @ 77°F (25°)

Performance Properties

Test Conditions	Hysol® MA 557 Performance Properties ¹			
	Cured 60 Minutes @		Cured 60 Minutes @	
	250°F	121°C	350°F	177°C
Tube Shear	PSI	MPa	PSI	MPa
75°F (24°C)	1191	8.2	940	6.5
250°F (121°C)	1063	7.3	720	5.0
Flexural Strength ²				
75°F (24°C)	900	6.2	850	5.9
350°F (177°C)	---	---	380	2.6

1) Hysol® MA 557 .050" (1.33mm) thick 2 1/8" core (3.2mm), 0.002" foil (.05mm), 2" thick (12.7mm)

Application Method

Remove adhesive material from cold storage and allow to warm 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 Hysol® MA 557 is 6 months at 0°F (-18°C). This product has an out time of 10 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.

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. Empty containers retain product residue and vapors, so obey all precautions when handling empty containers.

CAUTION! As with most epoxy based systems, the uncured adhesive may cause eye and skin irritation or allergic dermatitis. Contains epoxy resins.

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Users should review the Materials Safety Data Sheet (MSDS) and product label for the material to determine possible health hazards, appropriate engineering controls and precautions to be observed in using the material. Copies of the MSDS and label are available upon request.

