

AF-300 is a thermosetting epoxy resin film adhesive designed for working with FST prepregs in the production of composite components having low heat release and fire smoke toxicity properties.

AF-300 offers a versatile curing range from 80°C to 145°C, allows to work with Microtex R3-300 prepregs to produce sandwich structures via a variety of processing methods including press cure, autoclave cure and oven vacuum bag cure.

AF-300 is a FST film adhesive to work with FST prepregs for manufacturing composite parts to meet FAR 25.853 Appendix 'F' part I, IV and V.

AF-300 are available in various formats.

PRODUCT VARIANTS

Standard Product Version

100 gsm AF-300: adhesive film, 17 gsm carrier

150 gsm AF-300: adhesive film, 17 gsm carrier

Other Version:

150 gsm AF-300: adhesive film, unsupported

SHELF LIFE



OUT LIFE
28 days @ 21 °C



STORAGE LIFE
12 months @ -18 °C

TYPICAL APPLICATIONS



USE WITH NOMEX AND ALUMINIUM
HONEYCOMBS AND CORE MATERIALS

FEATURES



SUITABLE FOR AUTOCLAVE, PRESS
AND OVEN VACUUM BAG CURE



RECOMMENDED CURING TEMPERATURE:
80-145 °C



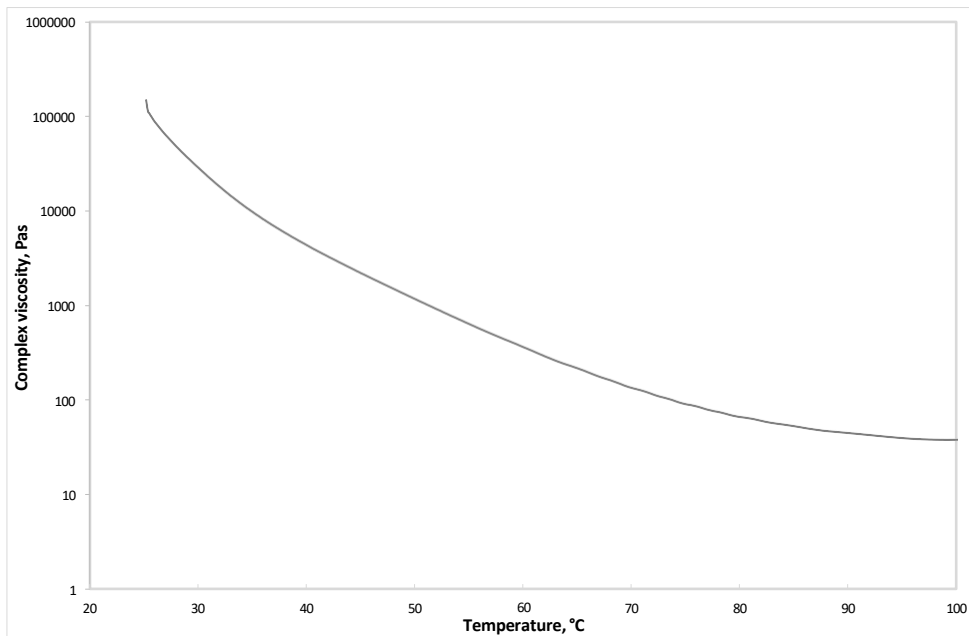
GOOD TACK

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MATRIX PROPERTIES

Resin density: 1.50 g/cm³ at room temperature.

Resin viscosity: ramp rate = 2 °C/min, $\dot{\gamma}$ = 10 rad/sec



CURING CONDITION AND T_g

Recommended Cure Cycle	
Vacuum Bag Pressure	min -0.85bar
Autoclave Pressure	2.0 bar
Ramp Rate	1.0 - 2.0 °C per minute
Recommended Cure Cycle	30 minutes @ 130°C
Cool down	3.0 - 5.0 °C per minute
T _g (DMA) [°C]	160 °C

MECHANICAL PROPERTIES

AF-300 supported		
30mins @ 130 °C, 2.0 bar		
100 gsm		
Property	Test Method	Value*
Climbing Drum Peel strength [N]	ASTMD 1781	316 (Top Skin)
		267 (Bottom Skin)
Lap Shear Strength [MPa]	ASTM D1002	15.0

* Test conditions: room temperature, dry, using Nomex honeycomb in according to ASTM method.

STORAGE CONDITIONS

This adhesive film should be stored as received in a cool dry place or in a refrigerator.

After removal from refrigerated storage, adhesive film should be allowed to reach room temperature before opening the polyethylene bag, thus preventing condensation (a full roll in its packaging can take more than 1 day).

PRECAUTIONS FOR USE

The usual precautions when handling uncured resins and fibrous materials should be observed, and a Safety Data Sheet is available for this product.

SDS Reference Codes: AF-300: SDS-480

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