

AF-121 is a 80-125°C curing epoxy film adhesive.

It is a general-purpose film adhesive for composite-to-metal bonding and for co-curing in composite sandwich structures.

PRODUCT VARIANTS

Standard Product Version

150 gsm AF-121HM: adhesive film, 12 gsm veil carrier

300 gsm AF-121HM: adhesive film, 12 gsm veil carrier

Other Version:

300 gsm AF-121HM: 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
AND OVEN VACUUM BAG CURING



RECOMMENDED CURING TEMPERATURE:
80-125 °C



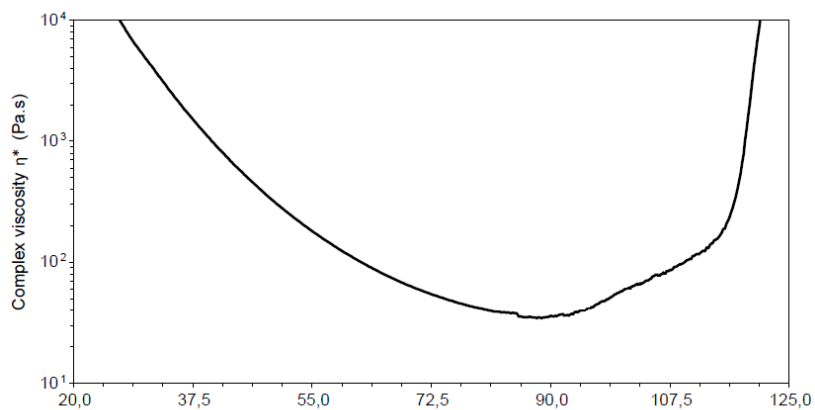
MEDIUM TACK

NOTE: All technical information contained in this document are given in good faith and are based on tests believed to be reliable, but their accuracy and completeness are not guaranteed. They do not constitute an offer to any person and shall not be deemed to form the basis of any contract. Accordingly, the user shall determine the suitability of the products for their intended use prior to purchase and shall assume all risk and liability in connection therewith. The information contained herein is under constant review and liable to be modified. All products are sold subject to Microtex Composites Srl terms and conditions of sale. Copyright 2020 - Microtex Composites Srl. All rights reserved worldwide. All trademarks or registered trademarks are the property of their respective owners.

MATRIX PROPERTIES

Resin density: 1.18 g/cm³ at room temperature.

Resin viscosity: ramp rate = 2 °C/min, $V = 10$ rad/sec



CURING CONDITION AND Tg

Recommended Curing Cycle	
Vacuum Bag Pressure	980 mbar
Autoclave Pressure ¹	2.0 bar
Ramp Rate	2.0 °C per minute
Recommended Cure Cycle	1 hours @ 125 °C
Cool down	2 °C per minute
Tg (DSC) [°C]	110 °C

TECHNICAL DATA SHEET

CURING CONDITION AND Tg

Recommended Curing Cycle	
Vacuum Bag Pressure	980 mbar
Autoclave Pressure ¹	1.0 bar (O.o.A.)
Ramp Rate	2.0 °C per minute
Recommended Cure Cycle	12 hours @ 80 °C
Cool down	2 °C per minute
Tg (DSC) [°C]	100 °C

MECHANICAL PROPERTIES

AF-121 supported		150 gsm	300 gsm
1hr @ 125 °C, 2.0 bar			
Property	Test Method	Value*	Value*
Climbing Drum Peel Test [Nm/m] Top /Bottom Skin	ASTM D1781-98	33 (Top Skin)	102 (Top Skin)
		32 (Bottom Skin)	100 (Bottom Skin)
Lap Shear Strenght Test [MPa]	ASTM D1002-10	23	23

* Test conditions: room temperature, dry, using Alclad aluminum sheet metal in according to ASTM method.

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MECHANICAL PROPERTIES

AF-121 supported		150 gsm	300 gsm
12hrs @ 80 °C, 1.0 bar (O.o.A.)			
Property	Test Method	Value*	Value*
Climbing Drum Peel Test [Nm/m]	ASTM D1781-98	21 (Top Skin)	63 (Top Skin)
		18 (Bottom Skin)	65 (Bottom Skin)
Lap Shear Strenght Test [MPa]	ASTM D1002-10	18	19

* Test conditions: room temperature, dry, using Alclad aluminum sheet metal in according to ASTM method.

AF-121 unsupported		300 gsm
12hrs @ 80 °C, 1.0 bar (O.o.A.)		
Property	Test Method	Value*
Climbing Drum Peel Test [Nm/m]	ASTM D1781-98	65 (Top Skin)
		69 (Bottom Skin)
Lap Shear Strenght Test [MPa]	ASTM D1002-10	15

* Test conditions: room temperature, dry, using Alclad aluminum sheet metal in according to ASTM method.