



PRODUCT INFORMATION

AIRDEC-SF

AIRDEC-SF is a decorated thermoplastic sheet laminate that can be thermoformed into a variety of aircraft interior parts. AIRDEC-SF meets the ¹FAA 60-second vertical flammability requirements, and is typically used for passenger aircraft interior parts exempt from the more stringent heat release rate and smoke emission requirements.

THICKNESS	AIRDEC-SF is available in thicknesses from 0.010" to 0.160" thick, to provide the optimum balance of part depth and stiffness.
COLOR	AIRDEC-SF is available in an unlimited number of colors and patterns.
TEXTURE	AIRDEC-SF is available in a wide range of textures, and it will also accurately reproduce textured mold detail.
GLOSS	AIRDEC-SF is available in both high and medium gloss variations.
CLEANING	Because of its ² Kynar [®] surface, AIRDEC-SF possesses exceptional resistance to staining, ³ solvents, chemicals, and abrasion, and is very easy to clean with common cleaners.
QUALITY	Founded on years of experience, high quality materials, and a very controlled process, the color, texture, and integrity of this product is guaranteed.
ADHESIVES	AIRDEC-SF is available bare without adhesive, with pressure sensitive adhesive for room temperature application, and with strippable heat activated adhesive that is activated at approximately 240°F (115°C) for vacuum application to formed composite panels.
PROPERTIES	AIRDEC-SF is a thermoplastic sheet laminate, which exhibits excellent part stiffness and impact resistance, and accurate reproduction of mold detail in conventional thermoforming operations at forming temperatures of 335°F to 365°F (168°C to 185°C).
TYPICAL APPLICATIONS	Seat Parts Tray Tables Lavatory Shrouds
FORMAT	AIRDEC-SF is available in sheets nominally 48 inches (1219 mm) wide, by 96 inches (2438 mm) long. Other sizes are available upon request.

¹ FAR 25.853 Paragraph (d) and FAR 25 Appendix F

² Kynar[®] is the registered trademark of ATOFINA Chemicals Inc.

³ The use of Ketone solvents is not recommended.

AIRDEC-SF

CHARACTERISTIC	TEST METHOD	UNIT	TYPICAL VALUES
THICKNESS	Micrometer before texturing	inch / mm	0.020 / 0.50 ² 0.023 / 0.58 ³ 0.022 / 0.56 ⁴
WEIGHT	ASTM D 461 (11)	oz/yd ² / g/m ²	25 / 848 ² 27 / 915 ³ 27 / 915 ⁴
ADHESION OF LAYERS	DMS 2290 4.5.4 and 3.4.4	Pass / Fail	Pass ^{2,3,4}
COLORFASTNESS TO LIGHT	DMS 2292 4.5.2 and 3.4.2 FTMS No. 191 Method 5660	Pass / Fail	Pass (no change after 50 hours)
TENSILE STRENGTH	ASTM D-638	psi / MPa	6000 / 41.4 ¹
FLEXURAL STRENGTH	ASTM D-790	psi / MPa	9000 / 62.1 ¹
FLEXURAL MODULUS	ASTM D-790	psi / MPa	340000 / 2344 ¹
HARDNESS	ASTM D-785	Rockwell R	105 ¹
HEAT DEFLECTION TEMPERATURE	ASTM D-648	°F / °C at 264 psi	162 / 72.2 ¹
FLAMMABILITY (60 Second Vertical)	FAR 25.853 (d) / FAR 25 App. F Pt. IV Amdt. 83	Pass / Fail	Pass ^{2,3,4}
DRYING TIME	Experiment	Hours	1 hour at 250°F (121°C) per 0.040 inches (1 mm) of thickness ⁵
FORMING TEMPERATURE	Experiment	°F / °C	335°F - 365°F / 168°C - 185°C
HEAT ACTIVATED ADHESIVE ACTIVATION TEMPERATURE	Experiment	°F / °C	240°F / 115°C
MOLD SHRINKAGE	Experiment	in / in mm / mm	0.005 - 0.007 ¹ 0.005 - 0.007 ¹

¹ Tests performed on 0.125-inch thick material

² Tests performed on 0.020-inch thick material, with no adhesive and no backing panel

³ Tests performed on 0.020-inch thick material, with pressure sensitive adhesive and backing panel

⁴ Tests performed on 0.020-inch thick material, with heat activated adhesive and backing panel

⁵ Not recommended or required for pressure sensitive backed material

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Notice: The information in this datasheet is given in good faith and is based on our current technical knowledge of this product and on careful tests carried out in our laboratories. No liability is accepted, nor is any guaranty given or implied for any application of this product.

AIRDEC-SF

CHARACTERISTIC	TEST METHOD	UNIT	TYPICAL VALUES
THICKNESS	Micrometer before texturing	inch / mm	0.040 / 1.0 ¹ 0.080 / 2.0 ² 0.125 / 3.2 ³ 0.160 / 4.1 ⁴
WEIGHT	ASTM D 461 (11)	oz/yd ² / g/m ²	48 / 1630 ¹ 96 / 3250 ² 150 / 5080 ³ 192 / 6510 ⁴
ADHESION OF LAYERS	DMS 2290 4.5.4 and 3.4.4	Pass / Fail	Pass ^{1,2,3,4}
COLORFASTNESS TO LIGHT	DMS 2292 4.5.2 and 3.4.2 FTMS No. 191 Method 5660	Pass / Fail	Pass (no change after 50 hours) ^{1,2,3,4}
TENSILE STRENGTH	ASTM D-638	psi / MPa	6000 / 41.4 ³
FLEXURAL STRENGTH	ASTM D-790	psi / MPa	9000 / 62.1 ³
FLEXURAL MODULUS	ASTM D-790	psi / MPa	340000 / 2344 ³
IMPACT RESISTANCE	ASTM D-256	Izod notched ft/inch of notch	5 - 10 ³
HARDNESS	ASTM D-785	Rockwell R	105 ³
HEAT DEFLECTION TEMPERATURE	ASTM D-648	°F / °C at 264 psi	162 / 72.2 ³
FLAMMABILITY (60 Second Vertical)	FAR 25.853 (d)/ FAR 25 App. F Pt. IV Amdt. 83	Pass / Fail	Pass ^{1,2,3,4}
FLAMMABILITY	UL-94 (0.044)	Rating	V-O ^{1,2,3,4}
FLAMMABILITY (Radiant Panel)	ASTM E-162	Average Flamespread Index (Is)	<17 ^{1,2,3,4}
DRYING TIME	Experiment	Hours	1 hour at 250°F (121°C) per 0.040 inches (1 mm) of thickness
FORMING TEMPERATURE	Experiment	°F / °C	335°F - 365°F / 168°C - 185°C
MOLD SHRINKAGE	Experiment	in / in mm / mm	0.005 - 0.007 ³ 0.005 - 0.007 ³

¹ Tests performed on 0.040-inch thick, bare with no adhesive

² Tests performed on 0.080-inch thick, bare with no adhesive

³ Tests performed on 0.125-inch thick, bare with no adhesive

⁴ Tests performed on 0.160-inch thick, bare with no adhesive

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