

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