

EUROPLEX® PPSU sheets

Transparent and opaque polyphenylsulfone sheets for aircraft applications

EUROPLEX® PPSU is a flame-retardant sheet material based on polyphenylsulfone (PPSU). It shows excellent mechanical properties as well as good chemical resistance. The sheet series meets the fire standard requirements for many applications in public transport including the OSU 65/65 heat release requirements for large interior parts in passenger aircraft. EUROPLEX® PPSU sheets are available in transparent and opaque colors.

EUROPLEX® PPSU 99460 H opaque grey

The standard surface texture of the opaque PPSU sheet is the H (haircell) texture. The sheet receives an excellent rating in the OSU (Ohio State University) fire test, with test values clearly below the prescribed 65/65. Typical applications are door frames, interior ceiling panels, panels for partitions, galleys, cargo compartments, etc.

EUROPLEX® PPSU 99470 transparent low color tinted

EUROPLEX® PPSU 99470 is a low color tinted, transparent sheet grade of PPSU, which was developed specifically for aircraft interior applications. The sheet offers low heat release, low smoke generation, and low toxic gas emissions, thereby complying with the FAA/JAA regulation 14CFR Part 25.853 Appendix F. The sheet is available in different transparent (grey/ brown) colors. Custom color matching can also be provided. EUROPLEX® PPSU 99470 is ideally suited for a wide range of applications such as galley doors, stair case windows, shower doors, bar racks, cabin dividers, picture covers, large safety windows, etc.

EUROPLEX® PPSU 99470 KR/DF transparent with functional coating

The EUROPLEX® PPSU transparent sheet grades can be provided with a functional coating. Different systems can be applied, such as high-scratch resistance (KR) or white light-scattering



coating (DF). Functional coating for EUROPLEX® PPSU transparent sheet provide hardness, nonglare light-scattering surfaces combined with improved climatic resistance.

Requirements, approvals

Method	EUROPLEX® PPSU 99460 opaque	EUROPLEX® PPSU 99470 transparent	EUROPLEX® PPSU 99470 KR coating
FAR 25.853 (a) (1) (i) AITM 2.0002; 60 s vertical burn	pass	pass	pass
FAR 25.853 (a) (1) (ii) AITM 2.0002; 12 s vertical burn	pass	pass	pass
FAR 28.853 (c) AITM 2.0006 OSU Heat release 65/65	pass	pass*	pass*
FAR 25.853 (c) AITM 2.0007 Smoke density	pass	pass	pass
AITM 3.0005; Toxicity	pass	pass	pass
UL 94 Flammability rating	V0	V0	V0

*Upon and including 4.0 mm

Physical properties

Property	Test method	Unit	EUROPLEX® PPSU 99460 opaque	EUROPLEX® PPSU 99470 transparent	EUROPLEX® PPSU 99470 KR coating
Density	ISO 1183	g/cm ³	1.4	1.29	1.29
Vicat	ISO 306	°C	223	223	223
Max. service temperature		°C	195	195	195
Tensile strength	ISO 527	MPa	65	70	70
Tensile elongation	ISO 527	%	50	60–80	60–80
Modulus of elasticity	ISO 527	MPa	2,600	2,300	2,300
CHARPY impact strength	ISO 179	KJ/m ²	N	N	N
Transmittance at 4.0 mm	ISO 13468-1	%		45	42
Abrasion Taber CF-10F, 500 g	ISO 9352	% Haze			<2

N = no break

Sales range

Grade	Thickness mm	Width mm	Length mm	Color
EUROPLEX® 99460 H	1.0–3.0	1,400/1,250	up to 6,000	grey opaque
EUROPLEX® 99470 CF 130	4.0–5.0	1,250	up to 2,500	grey tinted transparent
EUROPLEX® 99470 CF 150	4.0–5.0	1,250	up to 2,500	brown tinted transparent
EUROPLEX® 99470 CF 130 KR	4.0–5.0	1,250	up to 2,500	grey tinted transparent brown tinted
EUROPLEX® 99470 CF 150 KR	4.0–5.0	1,250	up to 2,500	transparent
EUROPLEX® 99470 CF 130 DF	4.0–5.0	1,250	up to 2,500	white light diffusing
EUROPLEX® 99470 CF 150 DF	4.0–5.0	1,250	up to 2,500	white light diffusing

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