



Sheet material



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EUROPLEX® PPSU sheets for rail interior 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. The sheet is available in transparent and opaque colors (body colored). EUROPLEX® PPSU sheets are ideally suitable for vacuum deep-drawing and can be used for molded parts of window frames and for large scale wall and ceiling components. This meets the highest fire safety regulations in terms of burnup speed, smoke gas density, heat release, and toxicity. EUROPLEX® PPSU sheet material meets the R1 requirement for Hazard level (HL) 3 rail vehicles as specified in the fire protection standard CEN/TS 45545-2:2009.

Physical properties

Property	Test method	Unit	EUROPLEX® PPSU 99460 opaque	EUROPLEX® PPSU 99470 transparent
Density	ISO 1183	g/cm ³	1.4	1.29
Vicat	ISO 306	°C	223	223
Max. service temp.		°C	195	195
Tensile strength	ISO 527	MPa	65	70
Tensile elongation	ISO 527	%	50	60–80
Modulus of elasticity	ISO 527	MPa	2,600	2,300
Charpy impact	ISO 179	KJ/m ²	no failure	no failure
Transmittance	ISO 13468-1	%		45 at 4.0 mm

Test results / R1 requirement / specification standard CEN/TS 45545-2: 2009

Standard test method	EUROPLEX® R 99775 3.0 mm	EUROPLEX® R 99775 1.0 mm	EUROPLEX® PPSU 99470 4.0 mm	EUROPLEX® PPSU 99470 2.0 mm
ISO 5660-1				
Mahre (KW/m ²)	5.3	8.5	84.3	51.3
ISO 5658-2				
CFE (KW/m ²)	46.2	49.3	37.9	42.8
ISO 5659-2				
D s (4)	58	20	126	135
VO F 4	74	30	137	174
CIT 8 min	0.23	0.14	0.46	0.37

Röhm GmbH
Acrylic Products

Riedbahnstraße 70
64331 Weiterstadt
Germany

www.plexiglas.de
www.roehm.com

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Certified to DIN EN ISO 9001 (Quality) and DIN EN ISO 14001 (Environment)

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