

TECANYL VH2 Grey - Stock Shapes (rods, plates, tubes)

Chemical Designation

PPO (Polyphenylene oxide)

Colour

grey

Density

1.12 g/cm³

This data sheet is only for development purposes and can be changed without prior notice. The commercialisation of the product is not guaranteed.

Main features

- excellent dimensional stability
- very good chemical resistance
- flame retardant according to UL94 V-0
- low smoke emissions
- low moisture absorption
- good electrically insulating

Target Industries

- aircraft and aerospace interiors
- aircraft and aerospace technology
- Railway Interiors
- transportation

Mechanical properties	condition	value	unit	test method	comment
Modulus of elasticity (tensile test)		300,000	psi	ASTM D 638	
Tensile strength at yield		8200	psi	ASTM D 638	
Tensile strength at break		7600	psi	ASTM D 638	
Elongation at break (tensile test)		25	%	ASTM D 638	
Flexural strength		13,400	psi	ASTM D 790	
Modulus of elasticity (flexural test)	@ 73 °F	330,000	psi	ASTM D 790	
Notched impact strength (Izod)	@ 73 °F	5.6	ft-lbs/in	ASTM D 256	
Thermal properties	condition	value	unit	test method	comment
Deflection temperature	@ 264 psi	252	°F	ASTM D 648	1) (1) Publicly sourced resin data
Other properties	condition	value	unit	test method	comment
Flammability (UL94)		V0		-	1) (1) Units: 1.5 mm Publicly sourced resin data
Flammability	Glow Wire Flammability Index 960°C passes @	1.0		-	2) (2) Units: mm ASTM Test Method 60695-2 Publicly sourced resin data
Flammability	Glow Wire Ignitability Temp, 1.0 mm	775	°C	-	3) (3) ASTM Test Method 60695-2 Publicly sourced resin data
Flammability	Glow Wire Ignitability Temp, 1.5 mm	775	°C	-	4) (4) ASTM Test Method 60695-2 Publicly sourced resin data
Flammability	Glow Wire Ignitability Temp, 2.0 mm	775	°C	-	5) (5) ASTM Test Method 60695-2 Publicly sourced resin data
Flammability	Glow Wire Ignitability Temp, 3.0 mm	800	°C	-	6) (6) ASTM Test Method 60695-2 Publicly sourced resin data
Flammability	FAR 25.853 Appx F, Prt 1, (a), 1, (Air)	Passes		-	7) (7) 60 sec and 12 sec vertical test Publicly sourced resin data
Flammability	FAR 25.853 Appx F, Prt 1, (a), 1, (Air)	Passes		-	8) (8) FAA Smoke Density Test Publicly sourced resin data
Flammability	FAR 25.853 Appx F, Prt 1, (a), 1, (Air)	Passes	°C	-	9) (9) Toxicity - Draeger Tube Publicly sourced resin data
Flammability	ASTM E 162 (rail)	~15		-	10) (10) Flame Spread Index Publicly sourced resin data
Flammability	ASTM E 662 (Air/Rail) Ds @ 1.5 min	11-13 Passes		-	11) (11) FAR 25.853 Publicly sourced resin data
Flammability	ASTM E 662 (Air/Rail) Ds @ 4.0 min	20-40 passes		-	12) (12) FAR 25.853 Publicly sourced resin data

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