

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

This information reflects the current state of our knowledge and is intended only to assist and advise. It is given without obligation or liability. It does not assure or guarantee chemical resistance, quality of products or their suitability in any legally binding way. Values are not minimum or maximum values, but guidelines that can be used for comparative purposes in material selection. They are within the normal range of product properties and do not represent guaranteed property values. Testing under individual application circumstances is always recommended. Data is obtained from extruded shapes material unless otherwise noted. References to FDA compliance refer to the resins from which the products were made unless otherwise noted. All trade and patent rights should be observed. All rights reserved. Data sheet values are subject to periodic review, the most recent update can be found at www.ensingerplastics.com.

Ensinger Inc. Headquarters
365 Meadowlands Boulevard
Washington, PA 15301, USA

Phone 800-243-3221 Sales
Phone 800-869-4029 Technical
Fax 724-746-9209
sales@ensingerusa.com

Date: 2023/12/08

Version: A2