

TECANYL VH2 Black - Stock Shapes

Chemical Designation

PPO (Polyphenylene oxide)

Colour

black

Density

1.12 g/cm³

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	test method	comment
Modulus of elasticity (tensile test)		322,000 psi	ASTM D 638	
Tensile strength at yield		9280 psi	ASTM D 638	
Tensile strength at break		7690 psi	ASTM D 638	
Flexural strength		14,500 psi	ASTM D 790	
Modulus of elasticity (flexural test)	@ 73 °F	342,000 psi	ASTM D 790	
Impact strength (Izod)	@ 73 °F	5.6 ft-lbs/in	ASTM D 256	
Thermal properties	condition	value	test method	comment
Deflection temperature	@ 264 psi	252 °F	ASTM D 648	
Other properties	condition	value	test method	comment
Flammability	60 sec. Vertical Bunsen Burner test FAR 25.853 Appx F, Prt 1, (a), 1, (Air)	Passes	FAR 25.853	1) (1) 3 mm specimen (2) ASTM Test Method 60695-2
Flammability	Glow Wire Ignitability Temp, 1.5 mm	775 °C	-	2) (3) FAR 25.853 (4) Units: 1.5 mm (5) Toxicity - Draeger Tube (resin data)
Flammability	ASTM E 662 (Air/Rail) Ds @ 4.0 min	20-40 passes	-	3) (6) ASTM Test Method 60695-2
Flammability (UL94)		V0	-	4) (7) ASTM Test Method 60695-2
Flammability	FAR 25.853 Appx F, Prt 1, (a), 1, (Air)	Passes	-	5) (8) FAR 25.853 (9) FAA Smoke Density Test (resin data)
Flammability	Glow Wire Ignitability Temp, 3.0 mm	800 °C	-	6) (10) ASTM Test Method 60695-2
Flammability	Glow Wire Ignitability Temp, 1.0 mm	775 °C	-	7) (11) Units: mm ASTM Test Method 60695-2
Flammability	ASTM E 662 (Air/Rail) Ds @ 1.5 min	11-13 Passes	-	8) (12) Flame Spread Index
Flammability	FAR 25.853 Appx F, Prt 1, (a), 1, (Air)	Passes	FAR 25.853	9)
Flammability	Glow Wire Ignitability Temp, 2.0 mm	775 °C	-	10)
Flammability	ASTM E 662 (Air/Rail) Ds @ 20 min	73-106 Meets FAR Req'ts	-	
Flammability	Glow Wire Flammability Index 960°C passes @	1.0	-	11)
Flammability	ASTM E 162 (rail)	~15	-	12)

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