

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

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	ASTMD 638	
Tensile strength at yield		9280 psi	ASTMD 638	
Tensile strength at break		7690 psi	ASTMD 638	
Flexural strength		14,500 psi	ASTMD 790	
Modulus of elasticity (flexural test)	@ 73 °F	342,000 psi	ASTMD 790	
Impact strength (Izod)	@ 73 °F	5.6 ft-lbs/in	ASTMD 256	
Thermal properties	condition	value	test method	comment
Deflection temperature	@ 264 psi	252 °F	ASTMD 648	
Other properties	condition	value	test method	comment
Flammability (UL94)		V0	-	1)
Flammability	FAR 25.853 Appx F, Prt 1, (a), 1, (Air)	Passes	-	2)
Flammability	Glow Wire Ignitability Temp, 3.0 mm	800 °C	-	3)
Flammability	Glow Wire Ignitability Temp, 1.0 mm	775 °C	-	4)
Flammability	ASTME 662 (Air/Rail) Ds @ 1.5 min	11-13 Passes	-	5)
Flammability	FAR 25.853 Appx F, Prt 1, (a), 1, (Air)	Passes	FAR 25.853	6)
Flammability	Glow Wire Ignitability Temp, 2.0 mm	775 °C	-	7)
Flammability	ASTME 662 (Air/Rail) Ds @ 20 min	73-106 Meets FAR Reqt's	-	
Flammability	Glow Wire Flammability Index 960°C passes @	1.0	-	8)
Flammability	ASTME 162 (rail)	~15	-	9)
Flammability	60 sec. Vertical Bunsen Burner test FAR 25.853 Appx F, Prt 1, (a), 1, (Air)	Passes	FAR 25.853	10)
Flammability	Glow Wire Ignitability Temp, 1.5 mm	775 °C	-	11)
Flammability	ASTME 662 (Air/Rail) Ds @ 4.0 min	20-40 passes	-	12)

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