

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

<i>Mechanical properties</i>	<i>condition</i>	<i>value</i>	<i>unit</i>	<i>test method</i>	<i>comment</i>
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	
Notched impact strength (Izod)	@ 73 °F	5.6	ft-lbs/in	ASTM D 256	
<i>Thermal properties</i>	<i>condition</i>	<i>value</i>	<i>unit</i>	<i>test method</i>	<i>comment</i>
Deflection temperature	@ 264 psi	252	°F	ASTM D 648	
<i>Other properties</i>	<i>condition</i>	<i>value</i>	<i>unit</i>	<i>test method</i>	<i>comment</i>
Flammability (UL94)		V0		-	1)
Flammability	Glow Wire Flammability Index 960°C passes @	1.0		-	2)
Flammability	Glow Wire Ignitability Temp, 1.0 mm	775	°C	-	3)
Flammability	Glow Wire Ignitability Temp, 1.5 mm	775	°C	-	4)
Flammability	Glow Wire Ignitability Temp, 2.0 mm	775	°C	-	5)
Flammability	Glow Wire Ignitability Temp, 3.0 mm	800	°C	-	6)
Flammability	60 sec. Vertical Bunsen Burner test FAR 25.853 Appx F, Prt 1, (a), 1, (Air)	Passes		FAR 25.853	7)
Flammability	FAR 25.853 Appx F, Prt 1, (a), 1, (Air)	Passes		FAR 25.853	8)
Flammability	FAR 25.853 Appx F, Prt 1, (a), 1, (Air)	Passes		-	9)
Flammability	ASTM E 162 (rail)	~15		-	10)
Flammability	ASTM E 662 (Air/Rail) Ds @ 1.5 min	11-13 Passes		-	11)
Flammability	ASTM E 662 (Air/Rail) Ds @ 4.0 min	20-40 passes		-	12)
Flammability	ASTM E 662 (Air/Rail) Ds @ 20 min	73-106 Meets FAR Req't's		-	

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