

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

### Chemical Designation

PPO (Polyphenylene oxide)

### Colour

black

### Density

1.12 g/cm<sup>3</sup>

### 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)		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	
Thermal properties	condition	value	unit	test method	comment
Deflection temperature	@ 264 psi	252	°F	ASTM D 648	
Other properties	condition	value	unit	test method	comment
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'ts	-	-	

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