

TECANYL VH2 black - halvfabrikat

Kemisk beteckning

PPE (Polyfenyleneter)

Färg

Svart solid

Densitet

1.1 g/cm³

Fillers

flamskyddsmedel (halogenfri)

Huvud egenskaper

- flame retardant as per FAR 25.853
- utmärkt dimensionsstabilitet
- väldigt bra kemisk resistans
- flamskyddsmedel enligt UL94 V-0
- låga rökutsläpp
- låg fuktabsorption
- bra elektriskt isolerande

Målindustrier

- Flygplan och rymd interiörer
- flygplan och rymdknkn
- Järnvägs interiörer
- transport

Mekaniska Egenskaper	parameter	värde	enhet	norm	anmärkning
Draghållfasthet	50 mm/min	57	MPa	DIN EN ISO 527-2	(1) For tensile test: specimen type 1b
Elasticitetsmodul (dragprov)	1mm/min	2300	MPa	DIN EN ISO 527-2	1)
Böjhållfasthet	50mm/min	57	MPa	DIN EN ISO 527-2	(2) For flexural test: support span 64mm, norm specimen.
Dragtöjning	50mm/min	11	%	DIN EN ISO 527-2	(3) Specimen 10x10x10mm
Brottförlängning	50mm/min	20	%	DIN EN ISO 527-2	(4) Specimen 10x10x50mm, modulus range between 0.5 and 1% compression.
Böjhållfasthet	2mm/min, 10 N	96	MPa	DIN EN ISO 178	(5) For Charpy test: support span 64mm, norm specimen.
Elasticitetsmodul (böjningstest)	2mm/min, 10 N	2100	MPa	DIN EN ISO 178	(6) Specimen in 4mm thickness
Kompressionsstyrka	1% / 2% / 5%	19/34/77	MPa	EN ISO 604	3)
Kompressionsmodul	5mm/min	1300	MPa	EN ISO 604	4)
slagstyrka (charpy)	max. 7,5J	91	kJ/m ²	DIN EN ISO 179-1eU	5)
Skårslahseghet (Charpy)	max. 7,5J	16	%	DIN EN ISO 179-1eA	
Kultrycks hårdhet		143	MPa	ISO 2039-1	6)
Värmeledningsförmåga	parameter	värde	enhet	norm	anmärkning
Glasövergångstemperatur		152	°C	DIN EN ISO 11357	(1) Found in public sources.
Service temperatur	short term	110	°C	-	1) Individual testing regarding application conditions is mandatory.
Service temperatur	long term	85	°C	-	
termisk expansion	23-60°C, longitudinal	8,1	10 ⁻⁵ K ⁻¹	DIN EN ISO 11359-1;2	
termisk expansion	23-100°C, longitudinal	8,1	10 ⁻⁵ K ⁻¹	DIN EN ISO 11359-1;2	
Övriga egenskaper	parameter	värde	enhet	norm	anmärkning
Vatten absorption	24h / 96h (23°C)	0.08/0.15	%	DIN EN ISO 62	(1) passed, 3 mm specimen
brännbarhet	60 sec. Vertical Bunsen Burner test FAR 25.853 Appx F, Prt 1, (a), 1, (Air)	+		FAR 25.853	1) (2) ASTM Test Method 60695-2
brännbarhet	Glow Wire Ignitability Temp, 1.0 mm	775	°C	-	2) (3) passed, FAR 25.853
brännbarhet	ASTM E 662 (Air/Rail) Ds @ 4.0 min	20-40		-	3) (4) ASTM Test Method 60695-2
brännbarhet	Glow Wire Ignitability Temp, 3.0 mm	800	°C	-	4) (5) passed, Toxicity - Draeger Tube (resin data)
brännbarhet	FAR 25.853 Appx F, Prt 1, (a), 1, (Air)	+		-	5) (6) ASTM Test Method 60695-2
brännbarhet	Glow Wire Flammability Index 960°C passes @	1.0	mm	-	6) (7) ASTM Test Method 60695-2
brännbarhet	Glow Wire Ignitability Temp, 1.5 mm	775	°C	-	7) (8) passed, FAR 25.853
brännbarhet	ASTM E 662 (Air/Rail) Ds @ 1.5 min	11-13		-	8) (9) passed, FAA Smoke Density Test (resin data)
brännbarhet	FAR 25.853 Appx F, Prt 1, (a), 1, (Air)	+		FAR 25.853	9) (10) Units: 1.5 mm
Brandklassning (UL94)		V0		-	10) (11) ASTM Test Method 60695-2
brännbarhet	Glow Wire Ignitability Temp, 2.0 mm	775	°C	-	11)
brännbarhet	ASTM E 162 (rail)	~15		-	12) (12) Flame Spread Index

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