

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 rymdknik
- 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) (2) For flexural test: support span 64mm, norm specimen.
Böjhållfasthet	50mm/min	57	MPa	DIN EN ISO 527-2	(3) Specimen 10x10x10mm
Dragtöjning	50mm/min	11	%	DIN EN ISO 527-2	(4) Specimen 10x10x50mm, modulus range between 0.5 and 1% compression.
Brottförlängning	50mm/min	20	%	DIN EN ISO 527-2	(5) For Charpy test: support span 64mm, norm specimen.
Böjhållfasthet	2mm/min, 10 N	96	MPa	DIN EN ISO 178	(2) (6) Specimen in 4mm thickness
Elasticitetsmodul (böjningstest)	2mm/min, 10 N	2100	MPa	DIN EN ISO 178	
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	long term	85	°C	-	Individual testing regarding application conditions is mandatory.
Service temperatur	short term	110	°C	-	(1)
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) ASTM Test Method 60695-2
brännbarhet	Glow Wire Ignitability Temp, 3.0 mm	800	°C	-	(1) (2) ASTM Test Method 60695-2
brännbarhet	Glow Wire Ignitability Temp, 2.0 mm	775	°C	-	(2) (3) ASTM Test Method 60695-2
brännbarhet	Glow Wire Ignitability Temp, 1.5 mm	775	°C	-	(3) (4) ASTM Test Method 60695-2
brännbarhet	Glow Wire Ignitability Temp, 1.0 mm	775	°C	-	(4) (5) Units: 1.5 mm
Brandklassning (UL94)		V0	-	-	(6) ASTM Test Method 60695-2
brännbarhet	Glow Wire Flammability Index 960°C passes @	1.0	mm	-	(7) passed, 3 mm specimen
brännbarhet	60 sec. Vertical Bunsen Burner test FAR 25.853 Appx F, Prt 1, (a), 1, (Air)	+	-	FAR 25.853	(8) passed, FAA Smoke Density Test (resin data)
brännbarhet	FAR 25.853 Appx F, Prt 1, (a), 1, (Air)	+	-	FAR 25.853	(9) passed, Toxicity - Draeger Tube (resin data)
brännbarhet	FAR 25.853 Appx F, Prt 1, (a), 1, (Air)	+	-	-	(10) Flame Spread Index
brännbarhet	ASTM E 162 (rail)	~15	-	-	(11) passed, FAR 25.853
brännbarhet	ASTM E 662 (Air/Rail) Ds @ 1.5 min	11-13	-	-	(12) passed, FAR 25.853
brännbarhet	ASTM E 662 (Air/Rail) Ds @ 4.0 min	20-40	-	-	

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 www.ensingerplastics.com.