Property Data

Envalior
Imagine the Future

Arnite® TV4 230 SF

PBT-GF15 FR(17)

15% Glass Reinforced, Flame Retardant, High Flow

Print Date: 2025-01-21

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES	**VALUE**		
Melt volume-flow rate	7	cm³/10min	ISO 1133
Temperature	250	°C	ISO 1133
Load	2.16	kg	ISO 1133
Molding shrinkage (normal)	1.2	%	ISO 294-4
Molding shrinkage (parallel)	0.9	%	ISO 294-4
MECHANICAL PROPERTIES	**VALUE**		
Tensile modulus	7000	MPa	ISO 527-1/-2
Stress at break	105	MPa	ISO 527-1/-2
Strain at break	2.9	%	ISO 527-1/-2
Flexural modulus	6600	MPa	ISO 178
Flexural strength	160	MPa	ISO 178
Charpy impact strength (+23°C)	35	kJ/m²	ISO 179/1eU
Charpy impact strength (-30°C)	25	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	6	kJ/m²	ISO 179/1eA
Charpy notched impact strength (-30°C)	6	kJ/m²	ISO 179/1eA
THERMAL PROPERTIES	**VALUE**		
Melting temperature (10°C/min)	225	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	200	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	215	°C	ISO 75-1/-2
Coeff. of linear therm. expansion (parallel)	0.5	E-4/°C	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	0.8	E-4/°C	ISO 11359-1/-2

Seller represents and warrants exclusively that on the date of delivery by Seller the product shall be in conformity with the specifications agreed upon. Seller makes no other representations or warranties, whether express or implied.
Seller is not responsible or liable for the design of the products of the Customer and it is the responsibility of the Customer to determine that the Seller's product is safe, complies with application laws and regulations, and is technically or otherwise fit for its intended use. Seller does not endorse or claim suitability of its products for a specific application and disclaims each and every representation or warranty, whether express or implied, in that respect.
Typical values are indicative only and are not to be construed as being binding specifications. Colorants in the product or other additives may cause significant variations in typical values.
Copyright © Envalior 2025. All rights reserved. No part of the information may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, or other electronic or mechanical methods, without the prior written permission of Envalior.

Property Data

Arnite® TV4 230 SF

Print Date: 2025-01-21

PROPERTIES	*TYPICAL DATA*	*UNIT*	*TEST METHOD*
Burning Behav. at 0.75 mm nom. thickn.	V-0	class	IEC 60695-11-10
Thickness tested	0.75	mm	IEC 60695-11-10
Burning Behav. at 1.5 mm nom. thickn.	V-0	class	IEC 60695-11-10
Thickness tested	1.5	mm	IEC 60695-11-10
Burning Behav. at 3.0 mm nom. thickn.	V-0	class	IEC 60695-11-10
Thickness tested	3	mm	IEC 60695-11-10
Glow Wire Flammability Index GWFI	960	°C	IEC 60695-2-12
GWFI (Thickness (1) tested)	1.5	mm	IEC 60695-2-12
Glow Wire Flammability Index GWFI	960	°C	IEC 60695-2-12
GWFI (Thickness (2) tested)	0.75	mm	IEC 60695-2-12
Glow Wire Ignition Temperature GWIT	725	°C	IEC 60695-2-13
GWIT (Thickness (1) tested)	1.5	mm	IEC 60695-2-13
Glow Wire Ignition Temperature GWIT	800	°C	IEC 60695-2-13
GWIT (Thickness (2) tested)	0.75	mm	IEC 60695-2-13

ELECTRICAL PROPERTIES	*VALUE*		
Relative permittivity (100Hz)	3.7	-	IEC 62631-2-1
Relative permittivity (1 MHz)	3.5	-	IEC 62631-2-1
Dissipation factor (100 Hz)	25	E-4	IEC 62631-2-1
Dissipation factor (1 MHz)	140	E-4	IEC 62631-2-1
Volume resistivity	>1E13	Ohm*m	IEC 62631-3-1
Electric strength	28	kV/mm	IEC 60243-1
Comparative tracking index	250	V	IEC 60112
Comparative tracking index (PLC)	2	class	UL 746A

OTHER PROPERTIES	*VALUE*		
Water absorption	0.3	%	Sim. to ISO 62
Humidity absorption	0.15	%	Sim. to ISO 62
Density	1560	kg/m³	ISO 1183

Seller represents and warrants exclusively that on the date of delivery by Seller the product shall be in conformity with the specifications agreed upon. Seller makes no other representations or warranties, whether express or implied.
Seller is not responsible or liable for the design of the products of the Customer and it is the responsibility of the Customer to determine that the Seller's product is safe, complies with application laws and regulations, and is technically or otherwise fit for its intended use. Seller does not endorse or claim suitability of its products for a specific application and disclaims each and every representation or warranty, whether express or implied, in that respect.
Typical values are indicative only and are not to be construed as being binding specifications. Colorants in the product or other additives may cause significant variations in typical values.
Copyright © Envalior 2025. All rights reserved. No part of the information may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, or other electronic or mechanical methods, without the prior written permission of Envalior.