Property Data

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Durethan® BKV25F30

PA6–GF25 FR(17)

25% Glass Reinforced, Injection Molding, Flame Retardant, Heat Stabilized

Print Date: 2024–12–10

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES	DRY / COND		
Molding shrinkage (parallel)	0.3 / *	%	ISO 294–4
Molding shrinkage (normal)	0.6 / *	%	ISO 294–4
MECHANICAL PROPERTIES	DRY / COND		
Tensile modulus	11000 / 7300	MPa	ISO 527–1/–2
Stress at break	150 / 90	MPa	ISO 527–1/–2
Strain at break	2.3 / 4.4	%	ISO 527–1/–2
Flexural modulus	10000 / 7000	MPa	ISO 178
Flexural strength	230 / 155	MPa	ISO 178
Tensile modulus (200°C)	1760	MPa	ISO 527–1/–2
Charpy impact strength (+23°C)	55 / 55	kJ/m²	ISO 179/1eU
Charpy impact strength (–30°C)	45 / 50	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	10 / 15	kJ/m²	ISO 179/1eA
Charpy notched impact strength (–30°C)	<10 / <10	kJ/m²	ISO 179/1eA
Izod notched impact strength (+23°C)	10 / 15	kJ/m²	ISO 180/1A
THERMAL PROPERTIES	DRY / COND		
Melting temperature (10°C/min)	222 / *	°C	ISO 11357–1/–3
Temp. of deflection under load (1.80 MPa)	205 / *	°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)	0.2 / *	E–4/°C	ISO 11359–1/–2
Coeff. of linear therm. expansion (normal)	0.9 / *	E–4/°C	ISO 11359–1/–2
Burning Behav. at 1.5 mm nom. thickn.	V–0 / *	class	IEC 60695–11–10

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PROPERTIES	*TYPICAL DATA*	*UNIT*	*TEST METHOD*
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
Burning Behav. at 0.4 mm nom. thickn.	V–0 / *	class	IEC 60695–11–10
Thickness tested	0.4 / *	mm	IEC 60695–11–10
Burning Behav. at 0.75 mm nom. thickn.	V–0 / *	class	IEC 60695–11–10
Thickness tested	0.75 / *	mm	IEC 60695–11–10
Glow Wire Flammability Index GWFI	960 / –	°C	IEC 60695–2–12
GWFI (Thickness (1) tested)	0.4 / –	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	850 / –	°C	IEC 60695–2–13
GWIT (Thickness (1) tested)	0.4 / –	mm	IEC 60695–2–13
Glow Wire Ignition Temperature GWIT	850 / –	°C	IEC 60695–2–13
GWIT (Thickness (2) tested)	0.75 / –	mm	IEC 60695–2–13

ELECTRICAL PROPERTIES	*DRY / COND*		
Volume resistivity	3.4E12 / –	Ohm*m	IEC 62631–3–1
Comparative tracking index	400 / –	V	IEC 60112

OTHER PROPERTIES	*DRY / COND*		
Water absorption	4.3 / *	%	Sim. to ISO 62
Humidity absorption	1.3 / *	%	Sim. to ISO 62
Density	1600 / –	kg/m³	ISO 1183

PROCESSING RECOMMENDATIONS	*VALUE*		
Drying temperature dry air dryer	80	°C	
Drying time dry air dryer	2–6	h	
Residual moisture content	0.03–0.12	%	acc. to Karl Fischer

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PROPERTIES	*TYPICAL DATA*	*UNIT*	*TEST METHOD*
Melt temperature (Tmin – Tmax)	270–290	°C	
Mold temperature	80–100	°C	