

Durethan® BKV35H2.0

PA6—GF35

35% Glass Reinforced, Injection Molding, Heat Stabilized

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES			
	DRY / COND		
Molding shrinkage (parallel)	0.25 / *	%	ISO 294-4
Molding shrinkage (normal)	0.7 / *	%	ISO 294-4
MECHANICAL PROPERTIES			
	DRY / COND		
Tensile modulus	11000 / 6500	MPa	ISO 527-1/-2
Stress at break	185 / 110	MPa	ISO 527-1/-2
Strain at break	3.3 / 6.5	%	ISO 527-1/-2
Flexural modulus	10500 / 6200	MPa	ISO 178
Flexural strength	290 / 180	MPa	ISO 178
Tensile modulus (200°C)	3390	MPa	ISO 527-1/-2
Charpy impact strength (+23°C)	90 / 100	kJ/m²	ISO 179/1eU
Charpy impact strength (-30°C)	75 / 70	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	12 / 20	kJ/m²	ISO 179/1eA
Charpy notched impact strength (-30°C)	<10 / 10	kJ/m²	ISO 179/1eA
Izod notched impact strength (+23°C)	15 / 20	kJ/m²	ISO 180/1A
THERMAL PROPERTIES			
	DRY / COND		
Melting temperature (10°C/min)	220 / *	°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)	0.95 / *	E-4/°C	ISO 11359-1/-2
Burning Behav. at 1.5 mm nom. thickn.	HB / *	class	IEC 60695-11-10

Property Data

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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.	HB / *	class	IEC 60695–11–10
Thickness tested	3 / *	mm	IEC 60695–11–10
Oxygen index	23 / *	%	ISO 4589–1/–2
Glow Wire Flammability Index GWFI	650 / –	°C	IEC 60695–2–12
GWFI (Thickness (1) tested)	2 / –	mm	IEC 60695–2–12
ELECTRICAL PROPERTIES	DRY / COND		
Comparative tracking index	475 / –	V	IEC 60112
OTHER PROPERTIES	DRY / COND		
Water absorption	6.5 / *	%	Sim. to ISO 62
Humidity absorption	1.9 / *	%	Sim. to ISO 62
Density	1410 / –	kg/m³	ISO 1183
MATERIAL SPECIFIC PROPERTIES	DRY / COND		
Viscosity number	140 / *	cm³/g	ISO 307, 1157, 1628
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
Melt temperature (Tmin – Tmax)	270–290	°C	
Mold temperature	80–120	°C	