

Durethan® ECOBKV25F30

PA6—GF25 FR(17)

25% Glass Reinforced, Injection Molding, Heat Stabilized, Recycled Content

Sustainability

Mass balanced
Recycled based

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
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

Property Data

Durethan® ECOBKV25F30

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
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
Thickness tested	5VA / *	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
Melt temperature (Tmin – Tmax)	270-290	°C	
Mold temperature	80-100	°C	