

Durethan[®] ECOAKV30HRH2.0

PA66–GF30

30% Glass Reinforced, Injection Molding, Heat Stabilized, Hydrolysis resistant,
 Recycled Content

Sustainability

Mass balanced
 Recycled based

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES			
	DRY / COND		
Molding shrinkage (parallel)	0.44 / *	%	ISO 294–4
Molding shrinkage (normal)	0.94 / *	%	ISO 294–4
MECHANICAL PROPERTIES			
	DRY / COND		
Tensile modulus	9700 / 6100	MPa	ISO 527–1/–2
Stress at break	180 / 120	MPa	ISO 527–1/–2
Strain at break	3.5 / 8	%	ISO 527–1/–2
Flexural modulus	9300 / 5700	MPa	ISO 178
Flexural strength	280 / 180	MPa	ISO 178
Tensile modulus (200°C)	3620	MPa	ISO 527–1/–2
Charpy impact strength (+23°C)	75 / 85	kJ/m ²	ISO 179/1eU
Charpy impact strength (–30°C)	65 / 75	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	10 / 20	kJ/m ²	ISO 179/1eA
Charpy notched impact strength (–30°C)	<10 / <10	kJ/m ²	ISO 179/1eA
Izod notched impact strength (–40°C)	<10 / <10	kJ/m ²	ISO 180/1A
THERMAL PROPERTIES			
	DRY / COND		
Melting temperature (10°C/min)	262 / *	°C	ISO 11357–1/–3
Temp. of deflection under load (1.80 MPa)	245 / *	°C	ISO 75–1/–2

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<i>PROPERTIES</i>	<i>TYPICAL DATA</i>	<i>UNIT</i>	<i>TEST METHOD</i>
Temp. of deflection under load (0.45 MPa)	250 / *	°C	ISO 75-1/-2
Coeff. of linear therm. expansion (parallel)	0.3 / *	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 3.0 mm nom. thickn.	HB / *	class	IEC 60695-11-10
Thickness tested	3 / *	mm	IEC 60695-11-10
Burning Behav. at 0.75 mm nom. thickn.	HB / *	class	IEC 60695-11-10
Thickness tested	0.75 / *	mm	IEC 60695-11-10
Oxygen index	26 / *	%	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
<i>ELECTRICAL PROPERTIES</i>	<i>DRY / COND</i>		
Relative permittivity (100Hz)	4 / 12	-	IEC 62631-2-1
Relative permittivity (1 MHz)	3.6 / 4.5	-	IEC 62631-2-1
Dissipation factor (100 Hz)	80 / 3000	E-4	IEC 62631-2-1
Dissipation factor (1 MHz)	160 / 900	E-4	IEC 62631-2-1
Volume resistivity	1E13 / 1E9	Ohm*m	IEC 62631-3-1
Surface resistivity	* / 1E13	Ohm	IEC 62631-3-2
Electric strength	35 / 30	kV/mm	IEC 60243-1
Comparative tracking index	450 / -	V	IEC 60112
<i>OTHER PROPERTIES</i>	<i>DRY / COND</i>		
Water absorption	5.5 / *	%	Sim. to ISO 62
Humidity absorption	2 / *	%	Sim. to ISO 62
Density	1360 / -	kg/m³	ISO 1183
<i>MATERIAL SPECIFIC PROPERTIES</i>	<i>DRY / COND</i>		
Viscosity number	153 / *	cm³/g	ISO 307, 1157, 1628

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PROCESSING RECOMMENDATIONS			
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)	280–300	°C	
Mold temperature	80–120	°C	