

Durethan® AKV33H2.0

PA66–GF33

33% Glass Reinforced, Injection Molding, General purpose, Heat Stabilized

<i>PROPERTIES</i>	<i>TYPICAL DATA</i>	<i>UNIT</i>	<i>TEST METHOD</i>
<i>RHEOLOGICAL PROPERTIES</i>			
	<i>DRY / COND</i>		
Molding shrinkage (parallel)	0.39 / *	%	ISO 294–4
Molding shrinkage (normal)	0.91 / *	%	ISO 294–4
<i>MECHANICAL PROPERTIES</i>			
	<i>DRY / COND</i>		
Tensile modulus	10300 / 6500	MPa	ISO 527–1/–2
Stress at break	190 / 115	MPa	ISO 527–1/–2
Strain at break	3 / 6	%	ISO 527–1/–2
Flexural modulus	9400 / 6000	MPa	ISO 178
Flexural strength	290 / 190	MPa	ISO 178
Charpy impact strength (+23°C)	80 / 90	kJ/m ²	ISO 179/1eU
Charpy impact strength (–30°C)	70 / 70	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	12 / 16	kJ/m ²	ISO 179/1eA
Charpy notched impact strength (–30°C)	10 / 10	kJ/m ²	ISO 179/1eA
Izod notched impact strength (+23°C)	13 / –	kJ/m ²	ISO 180/1A
<i>THERMAL PROPERTIES</i>			
	<i>DRY / COND</i>		
Melting temperature (10°C/min)	263 / *	°C	ISO 11357–1/–3
Temp. of deflection under load (1.80 MPa)	245 / *	°C	ISO 75–1/–2
Coeff. of linear therm. expansion (parallel)	0.26 / *	E–4/°C	ISO 11359–1/–2
Coeff. of linear therm. expansion (normal)	0.84 / *	E–4/°C	ISO 11359–1/–2
<i>OTHER PROPERTIES</i>			
	<i>DRY / COND</i>		
Density	1390 / –	kg/m ³	ISO 1183

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MATERIAL SPECIFIC PROPERTIES			
Viscosity number	143 / *	cm ³ /g	ISO 307, 1157, 1628
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	