

Durethan® AKV50

PA66–GF50

50% Glass Reinforced, Injection Molding

<i>PROPERTIES</i>	<i>TYPICAL DATA</i>	<i>UNIT</i>	<i>TEST METHOD</i>
MECHANICAL PROPERTIES			
	<i>DRY / COND</i>		
Tensile modulus	15700 / 10700	MPa	ISO 527-1/-2
Stress at break	220 / 170	MPa	ISO 527-1/-2
Strain at break	2.5 / 4	%	ISO 527-1/-2
Flexural modulus	14000 / 10300	MPa	ISO 178
Flexural strength	370 / 250	MPa	ISO 178
Charpy impact strength (+23°C)	95 / 95	kJ/m ²	ISO 179/1eU
Charpy impact strength (-30°C)	100 / 100	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	19 / 23	kJ/m ²	ISO 179/1eA
Charpy notched impact strength (-30°C)	15 / 15	kJ/m ²	ISO 179/1eA
Izod notched impact strength (+23°C)	14 / 18	kJ/m ²	ISO 180/1A
THERMAL PROPERTIES			
	<i>DRY / COND</i>		
Melting temperature (10°C/min)	263 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	250 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	250 / *	°C	ISO 75-1/-2
OTHER PROPERTIES			
	<i>DRY / COND</i>		
Water absorption	4 / *	%	Sim. to ISO 62
Humidity absorption	1.4 / *	%	Sim. to ISO 62
Density	1570 / -	kg/m ³	ISO 1183
MATERIAL SPECIFIC PROPERTIES			
	<i>DRY / COND</i>		
Viscosity number	146 / *	cm ³ /g	ISO 307, 1157, 1628

Property Data

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<i>PROPERTIES</i>	<i>TYPICAL DATA</i>	<i>UNIT</i>	<i>TEST METHOD</i>
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	