

Durethan® AKV35XTS1

PA66–GF35

35% Glass Reinforced, Injection Molding, Heat Stabilized

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES			
	DRY / COND		
Molding shrinkage (parallel)	0.35 / *	%	ISO 294–4
Molding shrinkage (normal)	0.9 / *	%	ISO 294–4
MECHANICAL PROPERTIES			
	DRY / COND		
Tensile modulus	10700 / 6800	MPa	ISO 527–1/–2
Stress at break	185 / 105	MPa	ISO 527–1/–2
Strain at break	3.2 / 5	%	ISO 527–1/–2
Flexural modulus	10100 / 6200	MPa	ISO 178
Flexural strength	280 / 180	MPa	ISO 178
Tensile modulus (200°C)	4080	MPa	ISO 527–1/–2
Charpy impact strength (+23°C)	75 / 85	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	10 / 15	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)	10 / 15	kJ/m ²	ISO 180/1A
THERMAL PROPERTIES			
	DRY / COND		
Melting temperature (10°C/min)	261 / *	°C	ISO 11357–1/–3
Temp. of deflection under load (1.80 MPa)	235 / *	°C	ISO 75–1/–2
Temp. of deflection under load (0.45 MPa)	250 / *	°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

OTHER PROPERTIES

DRY / COND

Property Data

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<i>PROPERTIES</i>	<i>TYPICAL DATA</i>	<i>UNIT</i>	<i>TEST METHOD</i>
Density	1410 / –	kg/m ³	ISO 1183
<i>PROCESSING RECOMMENDATIONS</i>			
	<i>VALUE</i>		
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	
admissible residence time at Tmax	<5	min	