

Durethan® AKV30XTS1

PA66–GF30

30% Glass Reinforced, Injection Molding, Heat Stabilized

<i>PROPERTIES</i>	<i>TYPICAL DATA</i>	<i>UNIT</i>	<i>TEST METHOD</i>
RHEOLOGICAL PROPERTIES			
	<i>DRY / COND</i>		
Molding shrinkage (parallel)	0.37 / *	%	ISO 294–4
Molding shrinkage (normal)	1.02 / *	%	ISO 294–4
MECHANICAL PROPERTIES			
	<i>DRY / COND</i>		
Tensile modulus	9900 / 6000	MPa	ISO 527–1/–2
Stress at break	175 / 110	MPa	ISO 527–1/–2
Strain at break	3 / 5.5	%	ISO 527–1/–2
Flexural modulus	9000 / 5800	MPa	ISO 178
Flexural strength	270 / 180	MPa	ISO 178
Tensile modulus (200°C)	3540	MPa	ISO 527–1/–2
Charpy impact strength (+23°C)	65 / –	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	9 / –	kJ/m ²	ISO 179/1eA
Charpy notched impact strength (–30°C)	8 / –	kJ/m ²	ISO 179/1eA
Izod notched impact strength (+23°C)	10 / –	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)	235 / *	°C	ISO 75–1/–2
Coeff. of linear therm. expansion (parallel)	0.25 / *	E–4/°C	ISO 11359–1/–2
Coeff. of linear therm. expansion (normal)	0.9 / *	E–4/°C	ISO 11359–1/–2
OTHER PROPERTIES			
	<i>DRY / COND</i>		
Density	1360 / –	kg/m ³	ISO 1183

Property Data

Durethan® AKV30XTS1

<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)	270–290	°C	
Mold temperature	80–120	°C	
admissible residence time at Tmax	<5	min	