

Durethan® AKV30XTS3

PA66–GF30

30% 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)	1 / *	%	ISO 294–4
MECHANICAL PROPERTIES			
	DRY / COND		
Tensile modulus	10000 / 6000	MPa	ISO 527–1/–2
Stress at break	175 / 110	MPa	ISO 527–1/–2
Strain at break	3 / 5	%	ISO 527–1/–2
Flexural modulus	9000 / 6000	MPa	ISO 178
Flexural strength	275 / 175	MPa	ISO 178
Tensile modulus (200°C)	3380	MPa	ISO 527–1/–2
Charpy impact strength (+23°C)	65 / 80	kJ/m ²	ISO 179/1eU
Charpy impact strength (–30°C)	55 / 50	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)	262 / *	°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)	0.95 / *	E–4/°C	ISO 11359–1/–2
Burning Behav. at 1.5 mm nom. thickn.	HB / *	class	IEC 60695–11–10
Thickness tested	1.5 / *	mm	IEC 60695–11–10

Property Data

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

<i>ELECTRICAL PROPERTIES</i>	<i>DRY / COND</i>		
Volume resistivity	>1E13 / -	Ohm*m	IEC 62631-3-1
Electric strength	34 / -	kV/mm	IEC 60243-1
Comparative tracking index	525 / -	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/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	