

# Durethan® AKV30FN22

## PA66–GF30 FR(30)

30% Glass Reinforced, Injection Molding, Flame Retardant (halogen free)

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
<b>RHEOLOGICAL PROPERTIES</b>			
	<b>DRY / COND</b>		
Molding shrinkage (parallel)	0.8 / *	%	ISO 294–4
Molding shrinkage (normal)	0.9 / *	%	ISO 294–4
<b>MECHANICAL PROPERTIES</b>			
	<b>DRY / COND</b>		
Tensile modulus	6000 / 3900	MPa	ISO 527–1/–2
Stress at break	85 / 56	MPa	ISO 527–1/–2
Strain at break	3.5 / 13.2	%	ISO 527–1/–2
Flexural modulus	6700 / 3700	MPa	ISO 178
Flexural strength	170 / 90	MPa	ISO 178
Charpy impact strength (+23°C)	35 / 60	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength (+23°C)	<10 / <10	kJ/m <sup>2</sup>	ISO 179/1eA
Izod notched impact strength (+23°C)	<10 / <10	kJ/m <sup>2</sup>	ISO 180/1A
<b>THERMAL PROPERTIES</b>			
	<b>DRY / COND</b>		
Melting temperature (10°C/min)	263 / *	°C	ISO 11357–1/–3
Temp. of deflection under load (1.80 MPa)	200 / *	°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)	0.4 / *	E–4/°C	ISO 11359–1/–2
Coeff. of linear therm. expansion (normal)	0.8 / *	E–4/°C	ISO 11359–1/–2
Burning Behav. at 1.5 mm nom. thickn.	V–2 / *	class	IEC 60695–11–10
Thickness tested	1.5 / *	mm	IEC 60695–11–10
Burning Behav. at 3.0 mm nom. thickn.	V–2 / *	class	IEC 60695–11–10
Thickness tested	3 / *	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 0.75 mm nom. thickn.	V-2 / *	class	IEC 60695-11-10
Thickness tested	0.75 / *	mm	IEC 60695-11-10
Glow Wire Flammability Index GWFI	960 / -	°C	IEC 60695-2-12
GWFI (Thickness (1) tested)	0.75 / -	mm	IEC 60695-2-12
Glow Wire Flammability Index GWFI	960 / -	°C	IEC 60695-2-12
GWFI (Thickness (2) tested)	1.5 / -	mm	IEC 60695-2-12
Glow Wire Ignition Temperature GWIT	775 / -	°C	IEC 60695-2-13
GWIT (Thickness (1) tested)	0.75 / -	mm	IEC 60695-2-13
<b><i>ELECTRICAL PROPERTIES</i></b>	<b><i>DRY / COND</i></b>		
Volume resistivity	>1E13 / -	Ohm*m	IEC 62631-3-1
Electric strength	30 / -	kV/mm	IEC 60243-1
Comparative tracking index	525 / -	V	IEC 60112
<b><i>OTHER PROPERTIES</i></b>	<b><i>DRY / COND</i></b>		
Density	1400 / -	kg/m³	ISO 1183
<b><i>MATERIAL SPECIFIC PROPERTIES</i></b>	<b><i>DRY / COND</i></b>		
Viscosity number	127 / *	cm³/g	ISO 307, 1157, 1628
<b><i>PROCESSING RECOMMENDATIONS</i></b>	<b><i>VALUE</i></b>		
Drying temperature dry air dryer	80	°C	
Drying time dry air dryer	2-6	h	
Residual moisture content	0.03-0.07	%	acc. to Karl Fischer
Melt temperature (Tmin – Tmax)	260-270	°C	
Mold temperature	80-100	°C	