

Durethan® AKV25FN04

(PA66+PA6)—GF25 FR(40)

25% Glass Reinforced, Injection Molding, Flame Retardant (halogen free)

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES			
	DRY / COND		
Molding shrinkage (parallel)	0.5 / *	%	ISO 294-4
Molding shrinkage (normal)	1 / *	%	ISO 294-4
MECHANICAL PROPERTIES			
	DRY / COND		
Tensile modulus	9300 / 5700	MPa	ISO 527-1/-2
Stress at break	120 / 80	MPa	ISO 527-1/-2
Strain at break	3.3 / 6.5	%	ISO 527-1/-2
Flexural modulus	8900 / 5700	MPa	ISO 178
Flexural strength	200 / 135	MPa	ISO 178
Tensile modulus (200°C)	2970	MPa	ISO 527-1/-2
Charpy impact strength (+23°C)	60 / 65	kJ/m²	ISO 179/1eU
Charpy impact strength (-30°C)	60 / 55	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	<10 / 13	kJ/m²	ISO 179/1eA
Charpy notched impact strength (-30°C)	<10 / <10	kJ/m²	ISO 179/1eA
Izod notched impact strength (+23°C)	<10 / —	kJ/m²	ISO 180/1A
THERMAL PROPERTIES			
	DRY / COND		
Melting temperature (10°C/min)	260 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	224 / *	°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)	0.8 / *	E-4/°C	ISO 11359-1/-2
Burning Behav. at 1.5 mm nom. thickn.	V-0 / *	class	IEC 60695-11-10

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Thickness tested	1.5 / *	mm	IEC 60695-11-10
Burning Behav. at 3.0 mm nom. thickn.	V-0 / *	class	IEC 60695-11-10
Thickness tested	3 / *	mm	IEC 60695-11-10
Burning Behav. at 0.75 mm nom. thickn.	V-0 / *	class	IEC 60695-11-10
Thickness tested	0.75 / *	mm	IEC 60695-11-10
Oxygen index	31 / *	%	ISO 4589-1/-2
Glow Wire Flammability Index GWFI	960 / -	°C	IEC 60695-2-12
GWFI (Thickness (1) tested)	0.4 / -	mm	IEC 60695-2-12
Glow Wire Flammability Index GWFI	960 / -	°C	IEC 60695-2-12
GWFI (Thickness (2) tested)	0.75 / -	mm	IEC 60695-2-12

ELECTRICAL PROPERTIES	DRY / COND		
Relative permittivity (100Hz)	3.9 / 7.3	-	IEC 62631-2-1
Relative permittivity (1 MHz)	3.4 / 3.8	-	IEC 62631-2-1
Dissipation factor (100 Hz)	200 / 935	E-4	IEC 62631-2-1
Dissipation factor (1 MHz)	180 / 595	E-4	IEC 62631-2-1
Volume resistivity	>1E13 / 2.4E11	Ohm*m	IEC 62631-3-1
Surface resistivity	* / 4.5E14	Ohm	IEC 62631-3-2
Electric strength	40 / 36	kV/mm	IEC 60243-1
Comparative tracking index	600 / -	V	IEC 60112

OTHER PROPERTIES	DRY / COND		
Water absorption	4.8 / *	%	Sim. to ISO 62
Humidity absorption	1.6 / *	%	Sim. to ISO 62
Density	1380 / -	kg/m³	ISO 1183

PROCESSING RECOMMENDATIONS	VALUE		
Drying temperature dry air dryer	80	°C	
Drying time dry air dryer	2-6	h	

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Melt temperature (Tmin – Tmax)	265–285	°C	
Mold temperature	80–100	°C	