

Durethan® AKV25F30

PA66—GF25 FR(17)

25% Glass Reinforced, Injection Molding, Heat Stabilized, Flame Retardant

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES			
	DRY / COND		
Molding shrinkage (parallel)	0.4 / *	%	ISO 294-4
Molding shrinkage (normal)	0.7 / *	%	ISO 294-4
MECHANICAL PROPERTIES			
	DRY / COND		
Tensile modulus	10500 / 8000	MPa	ISO 527-1/-2
Stress at break	150 / 100	MPa	ISO 527-1/-2
Strain at break	2.2 / 2.8	%	ISO 527-1/-2
Flexural modulus	10000 / 7300	MPa	ISO 178
Flexural strength	220 / 160	MPa	ISO 178
Charpy impact strength (+23°C)	50 / 50	kJ/m²	ISO 179/1eU
Charpy impact strength (-30°C)	40 / 40	kJ/m²	ISO 179/1eU
Izod notched impact strength (+23°C)	<10 / 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)	238 / *	°C	ISO 75-1/-2
Coeff. of linear therm. expansion (parallel)	0.3 / *	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
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 0.4 mm nom. thickn.	V-0 / *	class	IEC 60695-11-10
Thickness tested	0.4 / *	mm	IEC 60695-11-10



Durethan® AKV25F30

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
Burning Behav. at 0.75 mm nom. thickn.	V-0 / *	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)	0.4 / -	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
Glow Wire Ignition Temperature GWIT	875 / -	°C	IEC 60695-2-13
GWIT (Thickness (1) tested)	0.4 / -	mm	IEC 60695-2-13
Glow Wire Ignition Temperature GWIT	900 / -	°C	IEC 60695-2-13
GWIT (Thickness (2) tested)	0.75 / -	mm	IEC 60695-2-13

ELECTRICAL PROPERTIES	DRY / COND		
Comparative tracking index	400 / -	V	IEC 60112

OTHER PROPERTIES	DRY / COND		
Water absorption	3.9 / *	%	Sim. to ISO 62
Humidity absorption	1.2 / *	%	Sim. to ISO 62
Density	1620 / -	kg/m³	ISO 1183

PROCESSING RECOMMENDATIONS	VALUE		
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	80-100	°C	

