

Durethan® DPAKV30FN00

(PA66+PA6)—GF30 FR(40+72)

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

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES			
	DRY / COND		
Molding shrinkage (parallel)	0.2 / *	%	ISO 294-4
Molding shrinkage (normal)	0.7 / *	%	ISO 294-4
MECHANICAL PROPERTIES			
	DRY / COND		
Tensile modulus	10500 / 6500	MPa	ISO 527-1/-2
Stress at break	135 / 85	MPa	ISO 527-1/-2
Strain at break	2.8 / 5.4	%	ISO 527-1/-2
Flexural modulus	10500 / 5600	MPa	ISO 178
Flexural strength	215 / 135	MPa	ISO 178
Charpy impact strength (+23°C)	65 / –	kJ/m²	ISO 179/1eU
Charpy impact strength (–30°C)	60 / –	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	<10 / –	kJ/m²	ISO 179/1eA
Charpy notched impact strength (–30°C)	<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
Burning Behav. at 1.5 mm nom. thickn.	V-0 / *	class	IEC 60695-11-10
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

Property Data

Durethan® DPAKV30FN00

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
Burning Behav. at 0.4 mm nom. thickn.	V-0 / *	class	IEC 60695-11-10
Thickness tested	0.4 / *	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
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	750 / –	°C	IEC 60695-2-13
GWIT (Thickness (1) tested)	0.4 / –	mm	IEC 60695-2-13
Glow Wire Ignition Temperature GWIT	750 / –	°C	IEC 60695-2-13
GWIT (Thickness (2) tested)	0.75 / –	mm	IEC 60695-2-13

ELECTRICAL PROPERTIES	DRY / COND		
Relative permittivity (100Hz)	3.9 / 7.7	–	IEC 62631-2-1
Relative permittivity (1 MHz)	3.4 / 4	–	IEC 62631-2-1
Dissipation factor (100 Hz)	130 / 1130	E-4	IEC 62631-2-1
Dissipation factor (1 MHz)	135 / 575	E-4	IEC 62631-2-1
Volume resistivity	>1E13 / 2.5E11	Ohm*m	IEC 62631-3-1
Surface resistivity	* / 3.3E14	Ohm	IEC 62631-3-2
Electric strength	40 / 34	kV/mm	IEC 60243-1
Comparative tracking index	600 / –	V	IEC 60112

OTHER PROPERTIES	DRY / COND		
Water absorption	4.4 / *	%	Sim. to ISO 62
Humidity absorption	1.4 / *	%	Sim. to ISO 62
Density	1420 / –	kg/m³	ISO 1183

MATERIAL SPECIFIC PROPERTIES	DRY / COND		
------------------------------	------------	--	--

Property Data

Durethan® DPAKV30FN00

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
Viscosity number	135 / *	cm³/g	ISO 307, 1157, 1628
PROCESSING RECOMMENDATIONS	VALUE		
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)	265–285	°C	
Mold temperature	80–100	°C	