

EcoPaXX® Q-KS

PA410 FR

Flame Retardant (halogen- phosphorous-free)

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Properties	Typical Data	Unit	Test Method
Rheological properties	dry / cond		
Molding shrinkage (parallel)	1.1 / *	%	ISO 294-4
Molding shrinkage (normal)	0.9 / *	%	ISO 294-4
Mechanical properties	dry / cond		
Tensile modulus	3600 / 2000	MPa	ISO 527-1/-2
Stress at break	75 / 50	MPa	ISO 527-1/-2
Strain at break	6 / 30	%	ISO 527-1/-2
Yield strain	4 / -	%	ISO 527-1/-2
Charpy impact strength (+23°C)	75 / -	kJ/m ²	ISO 179/1eU
Charpy impact strength (-30°C)	85 / -	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	3 / 5	kJ/m ²	ISO 179/1eA
Charpy notched impact strength (-30°C)	2.8 / -	kJ/m ²	ISO 179/1eA
Flexural modulus	3900 / 2300	MPa	ISO 178
Flexural strength	120 / 65	MPa	ISO 178
Thermal properties	dry / cond		
Melting temperature (10°C/min)	250 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	110 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	190 / *	°C	ISO 75-1/-2
Burning Behav. at 1.5 mm nom. thickn.	V-0 / *	class	IEC 60695-11-10
Burning Behav. at thickness h	V-0 / *	class	IEC 60695-11-10
Thickness tested	0.4 / *	mm	IEC 60695-11-10
Oxygen index	36 / *	%	ISO 4589-1/-2

Properties	Typical Data	Unit	Test Method
Glow Wire Flammability Index GWFI	960 / -	°C	IEC 60695-2-12
GWFI (Thickness (1) tested)	0.75 / -	mm	IEC 60695-2-12
Glow Wire Ignition Temperature GWIT	960 / -	°C	IEC 60695-2-13
GWIT (Thickness (1) tested)	0.75 / -	mm	IEC 60695-2-13

Electrical properties

dry / cond

Volume resistivity	>1E13 / 7E11	Ohm*m	IEC 60093
Surface resistivity	* / 6E13	Ohm	IEC 60093
Electric strength	32 / 27	kV/mm	IEC 60243-1
Comparative tracking index	* / 600	V	IEC 60112

Other properties

dry / cond

Water absorption	4.8 / *	%	Sim. to ISO 62
Water absorption in water at 23°C after 24h	0.6 / *	%	ISO 62
Humidity absorption	1.7 / *	%	Sim. to ISO 62
Density	1160 / -	kg/m ³	ISO 1183
Biobased content	60	% (Bio C/Total C)	ASTM D6866-12 Method B