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AsahiKASEI

XYRON™ X1712

Asahi Kasei Corporation - Polyphenylene Ether + PS

Tuesday, February 15, 2022

General Information

Product Description

Modified PPE
40% Filler reinforced Flame retardant V-0
Stiffness High, Warpage Ultra-Low

General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • North America	
Filler / Reinforcement	• Filler, 40% Filler by Weight		
Additive	• Flame Retardant		
Features	• Flame Retardant	• High Stiffness	• Low Warpage
Processing Method	• Injection Molding		
Part Marking Code (ISO11469) (ISO 11469)	• >PPE+PS-GS40FR(40)<		

ASTM & ISO Properties [1]

Physical	Nominal Value	Unit	Test Method
Density	1.45	g/cm³	ISO 1183
Molding Shrinkage [2] (2.00 mm)	0.14 to 0.22	%	Internal Method
Water Absorption (24 hr, 23°C)	0.060	%	ISO 62
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Stress (Yield, 23°C)	68.0	MPa	ISO 527
Tensile Strain (Break, 23°C)	1.0	%	ISO 527
Flexural Modulus (23°C)	9200	MPa	ISO 178
Flexural Stress (23°C)	118	MPa	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength [3] (23°C)	4.0	kJ/m²	ISO 179
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load			ISO 75-2/A
1.8 MPa, Unannealed	109	°C	
CLTE			ISO 11359-2
Flow : -30 to 65°C	2.6E-5	cm/cm/°C	
Transverse : -30 to 65°C	4.4E-5	cm/cm/°C	
Heat Deflection Temperature - (1.8MPa, Unannealed)	110	°C	ASTM D648

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Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+16	ohms	IEC 60093
Volume Resistivity (23°C)	1.0E+16	ohms·cm	IEC 60093
Dielectric Constant			IEC 60250
100 Hz	3.40		
1 MHz	3.30		
Dissipation Factor			IEC 60250
100 Hz	6.0E-3		
1 MHz	9.0E-3		

Flammability	Nominal Value	Unit	Test Method
Flame Rating (1.5 mm)	V-0		UL 94

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	90 to 100	°C
Drying Time	2.0 to 4.0	hr
Processing (Melt) Temp	250 to 300	°C
Mold Temperature	60 to 90	°C

Notes

[1] Typical properties: these are not to be construed as specifications.

[2] 150x150x2 mm

[3] 4 mm