

XYRON™ X1509

Asahi Kasei Corporation - Polyphenylene Ether + PS

General Information

Product Description

Modified PPE
10% Filler reinforced Flame retardant V-1
Stiffness High, Warpage Ultra-Low,

General

Filler / Reinforcement	• Glass Flake, 10% Filler by Weight
Additive	• Flame Retardant
Features AKEP website	• Flame Retardant • Halogen Free • Warpage, Low
Processing Method	• Injection Molding
Part Marking Code (ISO11469) (ISO 11469)	• >PPE+PS-GS10FR(40)<

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.15	g/cm ³	ISO 1183
Molding Shrinkage ² (2.00 mm)	0.36 to 0.45	%	Internal Method
Water Absorption (24 hr, 23°C)	0.060	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Stress (Yield, 23°C)	45.0	MPa	ISO 527
Tensile Strain (Break, 23°C)	9.0	%	ISO 527
Flexural Modulus (23°C)	3100	MPa	ISO 178
Flexural Stress (23°C)	88.0	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength ³ (23°C)	4.0	kJ/m ²	ISO 179



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Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load 1.8 MPa, Unannealed	95.0	°C	ISO 75-2/A
CLTE			ISO 11359-2
Flow : -30 to 65°C	5.6E-5	cm/cm/°C	
Transverse : -30 to 65°C	6.8E-5	cm/cm/°C	
Heat Deflection Temperature - (1.8MPa, Unannealed)	97	°C	ASTM D648
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	3.10		
1 MHz	3.00		
Dissipation Factor			IEC 60250
100 Hz	2.0E-3		
1 MHz	3.0E-3		
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.75 mm	V-2		
1.5 mm	V-1		

Processing Information

Injection	Nominal Value	Unit
Drying Temperature - Hot Air Dryer	90 to 100	°C
Drying Time - Hot Air Dryer	2.0 to 4.0	hr
Processing (Melt) Temp	240 to 300	°C
Mold Temperature	50 to 80	°C

Notes

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

² 150x150x2 mm

³ 4 mm

