

XYRON™ X531V

Asahi Kasei Corporation - Polyphenylene Ether + PS

General Information

Product Description

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

General

Filler / Reinforcement	• Glass Fiber, 10% Filler by Weight
Additive	• Flame Retardant
Features AKEP website	• Flame Retardant • Halogen Free
Processing Method	• Injection Molding
Part Marking Code (ISO11469) (ISO 11469)	• >PPE+PS-GF10FR(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)	0.30 to 0.55	%	Internal Method
Water Absorption (24 hr, 23°C)	0.060	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Stress (Yield, 23°C)	71.0	MPa	ISO 527
Tensile Strain (Break, 23°C)	2.0	%	ISO 527
Flexural Modulus (23°C)	3600	MPa	ISO 178
Flexural Stress (23°C)	119	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength ³ (23°C)	5.0	kJ/m ²	ISO 179
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load 1.8 MPa, Unannealed	118	°C	ISO 75-2/A
CLTE - Flow (-30 to 65°C)	6.0E-5	cm/cm/°C	ISO 11359-2
Heat Deflection Temperature - (1.8MPa, Unannealed)	120	°C	ASTM D648



XYRON™ X531V

Asahi Kasei Corporation - Polyphenylene Ether + PS

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	3.0E-3		
1 MHz	5.0E-3		
Flammability	Nominal Value	Unit	Test Method
Flame Rating (1.5 mm)	V-1		UL 94

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	250 to 300	°C
Mold Temperature	70 to 90	°C

Notes

- ¹ Typical properties: these are not to be construed as specifications.
- ² 150x150x2 mm
- ³ 4 mm

