

XYRON™ X444H

Asahi Kasei Corporation - Polyphenylene Ether + PS

General Information

Product Description

Modified PPE
40% Filler reinforced Non-Flame retardant
Stiffness High, Warpage Low

General

Filler / Reinforcement	• Glass Fiber/Mineral, 40% Filler by Weight
Features AKEP website	• Warpage, Low
Processing Method	• Injection Molding
Part Marking Code (ISO11469) (ISO 11469)	• >PPE+PS-(GF+PS)40<

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.39	g/cm ³	ISO 1183
Molding Shrinkage ² (2.00 mm)	0.13 to 0.31	%	Internal Method
Water Absorption (24 hr, 23°C)	0.060	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Stress (Yield, 23°C)	84.0	MPa	ISO 527
Tensile Strain (Break, 23°C)	1.0	%	ISO 527
Flexural Modulus (23°C)	11700	MPa	ISO 178
Flexural Stress (23°C)	145	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength ³ (23°C)	6.0	kJ/m ²	ISO 179



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Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load 1.8 MPa, Unannealed	108	°C	ISO 75-2/A
CLTE			ISO 11359-2
Flow : -30 to 65°C	2.4E-5	cm/cm/°C	
Transverse : -30 to 65°C	5.4E-5	cm/cm/°C	
Heat Deflection Temperature - (1.8MPa, Unannealed)	110	°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	3.40		
1 MHz	3.30		
Dissipation Factor			IEC 60250
100 Hz	7.0E-3		
1 MHz	9.0E-3		
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.8 mm)	HB		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	60 to 90	°C

Notes

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

² 150x150x2 mm

³ 4 mm

