

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

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Europe • Asia Pacific • North America
Filler / Reinforcement	• Glass Fiber/Mineral, 40% Filler by Weight
Features	• Low Warpage
Processing Method	• Injection Molding
Part Marking Code (ISO 11469)	• >PPE+PS-(GF+MD)40<

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.39	g/cm ³	ISO 1183
Molding Shrinkage ² (0.0787 in)	0.13 to 0.31	%	Internal Method
Water Absorption (24 hr, 73°F)	0.060	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Stress (Yield, 73°F)	12200	psi	ISO 527
Tensile Strain (Break, 73°F)	1.0	%	ISO 527
Flexural Modulus (73°F)	1.70E+6	psi	ISO 178
Flexural Stress (73°F)	21000	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength ³ (73°F)	2.9	ft·lb/in ²	ISO 179
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	226	°F	ISO 75-2/A
CLTE - Flow (-22 to 149°F)	1.3E-5	in/in/°F	ISO 11359-2
CLTE - Transverse (-22 to 149°F)	3.0E-5	in/in/°F	ISO 11359-2
Heat Deflection Temperature - (1.8MPa, Unannealed)	230	°F	ASTM D648
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+16	ohms	IEC 60093
Volume Resistivity (73°F)	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 (0.03 in)	HB		UL 94

Processing Information

Injection	Nominal Value	Unit
Drying Temperature - Hot Air Dryer	194 to 212	°F
Drying Time - Hot Air Dryer	2.0 to 4.0	hr
Processing (Melt) Temp	482 to 572	°F
Mold Temperature	140 to 194	°F



Notes

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

² 150x150x2 mm

³ 4 mm

