

XYRON™ 440Z

Asahi Kasei Corporation - Polyphenylene Ether + PS

General Information

Product Description		
Modified PPE		
Unreinforced Flame retardant V-0		
General		
Additive	• Flame Retardant	
Features AKEP website	• Flame Retardant	• Halogen Free
Processing Method	• Injection Molding	
Part Marking Code (ISO11469) (ISO 11469)	• >PPE+PS-FR(40)<	

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.10	g/cm ³	ISO 1183
Molding Shrinkage ² (2.00 mm)	0.60 to 0.80	%	Internal Method
Water Absorption (24 hr, 23°C)	0.10	%	ISO 62
Outdoor Suitability (Black)	f1		UL 746C
Mechanical	Nominal Value	Unit	Test Method
Tensile Stress (Yield, 23°C)	67.0	MPa	ISO 527
Nominal Tensile Strain at Break (23°C)	8.0	%	ISO 527
Flexural Modulus (23°C)	2700	MPa	ISO 178
Flexural Stress (23°C)	106	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength ³ (23°C)	17	kJ/m ²	ISO 179



XYRON™ 440Z

Asahi Kasei Corporation - Polyphenylene Ether + PS

Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load 1.8 MPa, Unannealed	104	°C	ISO 75-2/A
CLTE			ISO 11359-2
Flow : -30 to 65°C	6.5E-5	cm/cm/°C	
Transverse : -30 to 65°C	7.2E-5	cm/cm/°C	
Heat Deflection Temperature - (1.8 MPa, 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	2.90		
1 MHz	2.90		
Dissipation Factor			IEC 60250
100 Hz	3.0E-3		
1 MHz	4.0E-3		
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.75 mm	V-0		
2.5 mm	5VA		

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 290	°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

