

XYRON™ 443Z

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	• Impact Resistance, High
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
Mechanical	Nominal Value	Unit	Test Method
Tensile Stress (Yield, 23°C)	62.0	MPa	ISO 527
Nominal Tensile Strain at Break (23°C)	14	%	ISO 527
Flexural Modulus (23°C)	2220	MPa	ISO 178
Flexural Stress (23°C)	96.0	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength ³ (23°C)	42	kJ/m ²	ISO 179
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	7.8E-5	cm/cm/°C	
Transverse : -30 to 65°C	8.9E-5	cm/cm/°C	



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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
1.00 GHz	2.90		
10.0 GHz	2.70		
Dissipation Factor			IEC 60250
1.00 GHz	4.1E-3		
10.0 GHz	4.6E-3		
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.75 mm, ALL	V-0		
3.0 mm, ALL	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	290 to 320	°C
Mold Temperature	60 to 100	°C

Notes

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

² 150x150x2 mm

³ 4 mm

