

XYRON™ 644Z

Asahi Kasei Corporation - Polyphenylene Ether + PS

General Information
Product Description

 Modified PPE
 Unreinforced Flame retardant V-0
 Heat resistance High

General

Material Status	<ul style="list-style-type: none"> Commercial: Active
Availability	<ul style="list-style-type: none"> Africa & Middle East Asia Pacific Europe North America
Additive	<ul style="list-style-type: none"> Flame Retardant
Features	<ul style="list-style-type: none"> Flame Retardant Halogen Free
Processing Method	<ul style="list-style-type: none"> Injection Molding
Part Marking Code (ISO 11469)	<ul style="list-style-type: none"> >PPE+PS-FR(40)<

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.10	g/cm ³	ISO 1183
Molding Shrinkage ² (0.0787 in)	0.70 to 0.90	%	Internal Method
Water Absorption (24 hr, 73°F)	0.10	%	ISO 62
Outdoor Suitability (Black)	f1		UL 746C
Mechanical	Nominal Value	Unit	Test Method
Tensile Stress (Yield, 73°F)	10700	psi	ISO 527
Nominal Tensile Strain at Break (73°F)	9.0	%	ISO 527
Flexural Modulus (73°F)	377000	psi	ISO 178
Flexural Stress (73°F)	16200	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength ³ (73°F)	9.5	ft·lb/in ²	ISO 179
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	259	°F	ISO 75-2/A
CLTE - Flow (-22 to 149°F)	3.4E-5	in/in/°F	ISO 11359-2
CLTE - Transverse (-22 to 149°F)	4.0E-5	in/in/°F	ISO 11359-2
RTI Elec	257	°F	UL 746B
RTI Imp	257	°F	UL 746B
RTI Str	257	°F	UL 746B
Heat Deflection Temperature - (1.8MPa, Unannealed)	130	°C	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 (5.20 GHz)	2.70		SPDR
Dielectric Constant (100 Hz)	2.90		IEC 60250
Dissipation Factor (5.20 GHz)	5.0E-3		SPDR
Dissipation Factor (100 Hz)	4.0E-3		IEC 60250
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.04 in	V-0		
0.08 in	5VA		

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	500 to 608 °F
Mold Temperature	140 to 212 °F

Notes

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

² 150x150x2 mm

³ 4 mm

