

# AsahiKASEI

## XYRON™ 644Z

Asahi Kasei Corporation - Polyphenylene Ether + PS

Friday, June 23, 2017

### General Information

#### Product Description

Modified PPE  
Unreinforced Flame retardant V-0  
Heat resistance High

#### General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Asia Pacific • Europe • North America
Additive	• Flame Retardant
Features	• Flame Retardant • High Heat Resistance
Processing Method	• Injection Molding

### ASTM & ISO Properties <sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density	1.09	g/cm <sup>3</sup>	ISO 1183
Molding Shrinkage <sup>2</sup> (2.00 mm)	0.50 to 0.80	%	Internal Method
Water Absorption (23°C, 24 hr)	0.10	%	ISO 62
Outdoor Suitability (Black)	f1		UL 746C
Mechanical	Nominal Value	Unit	Test Method
Tensile Stress (Yield, 23°C)	74.0	MPa	ISO 527-2
Nominal Tensile Strain at Break (23°C)	9.0	%	ISO 527-2
Flexural Modulus (23°C)	2440	MPa	ISO 178
Flexural Stress (23°C)	110	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength <sup>3</sup> (23°C)	21	kJ/m <sup>2</sup>	ISO 179
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (1.8 MPa, Unannealed)	129	°C	ISO 75-2/A
CLTE - Flow (-30 to 65°C)	7.0E-5	cm/cm/°C	ISO 11359-2
RTI Elec	125	°C	UL 746
RTI Imp	125	°C	UL 746
RTI Str	125	°C	UL 746
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
1.0 mm		V-0	
2.0 mm		5VA	

### Processing Information

Injection	Nominal Value	Unit
Drying Temperature	90 to 100	°C
Drying Time	2.0 to 4.0	hr
Processing (Melt) Temp	260 to 320	°C

#### Disclaimer:

- Data shown are typical values obtained by proper testing methods and should not be used for specification purpose. Please use these data for selecting the most appropriate grade suitable for specific usage. These data may be changed because of improvement in properties.
- Be sure to read the relevant SDS before handling and use, and always follow the Important Precautions.
- Do not use plastics in any of the following orally- or medically-related applications.
- Orally-related application : any part, device or component which may come into direct oral contact or into direct contact with drinking foods or beverages. For drinking water application, please consult Asahi Kasei Chemicals Corporation.
- Medically-related applications : any part, or component which may be used intracorporeally or which may in dialysis or other processes come into direct or indirect contact with body tissue, body fluids, or transfusion fluids.

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Injection	Nominal Value	Unit
Mold Temperature	60 to 100	°C

### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> 150x150x2 mm

<sup>3</sup> 4 mm

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