

# XYRON™ 540Z

### Asahi Kasei Corporation - Polyphenylene Ether + PS

Wednesday, May 13, 2020

	General I	nformation		
Product Description				
Modified PPE				
Unreinforced Flame retardant V-0				
General				
Material Status	<ul> <li>Commercial: Active</li> </ul>			
Availability	Africa & Middle East	• Europe		
	Asia Pacific	<ul> <li>North America</li> </ul>		
Additive	<ul> <li>Flame Retardant</li> </ul>			
Features	Flame Retardant			
Processing Method	Injection Molding			
	ASTM & ISC	O Properties <sup>1</sup>		
Physical		Nominal Value	Unit	Test Method
Density		1.10	g/cm³	ISO 1183
Molding Shrinkage <sup>2</sup> (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)		69.0	MPa	ISO 527
Nominal Tensile Strain at Break (23°C)		12	%	ISO 527
Flexural Modulus (23°C)		2500	MPa	ISO 178
Flexural Stress (23°C)		107	MPa	ISO 178
Impact		Nominal Value	Unit	Test Method
Charpy Notched Impact Strength <sup>3</sup> (23°C)		19	kJ/m²	ISO 179
Thermal		Nominal Value	Unit	Test Method
Deflection Temperature Under Load				
1.8 MPa, Unannealed		112	°C	ISO 75-2
1.8 MPa, Unannealed		120	°C	ASTM D648
CLTE				ISO 11359-2
Flow: -30 to 65°C		6.0E-5	cm/cm/°C	
Transverse : -30 to 65°C		6.9E-5	cm/cm/°C	
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		

#### 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
- 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 applications: 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 Corporation.
- Medically-related applications: any part, device 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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Flammability	Nominal Value Unit	Test Method
Flame Rating		UL 94
0.75 mm	V-0	
1.5 mm	5VB	
2.5 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	240 to 300 °C		
Mold Temperature	50 to 80 °C		

#### **Notes**

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

<sup>&</sup>lt;sup>2</sup> 150x150x2 mm

<sup>&</sup>lt;sup>3</sup> 4 mm