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AsahiKASEI

XYRON™ 644Z

Asahi Kasei Corporation - Polyphenylene Ether + PS

Tuesday, February 15, 2022

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	
Part Marking Code (ISO11469) (ISO 11469)	• >PPE+PS-FR(40)<	

ASTM & ISO Properties [1]

Physical	Nominal Value	Unit	Test Method
Density	1.10	g/cm³	ISO 1183
Molding Shrinkage [2] (2.00 mm)	0.70 to 0.90	%	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)	74.0	MPa	ISO 527
Nominal Tensile Strain at Break (23°C)	9.0	%	ISO 527
Flexural Modulus (23°C)	2600	MPa	ISO 178
Flexural Stress (23°C)	112	MPa	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength [3] (23°C)	20	kJ/m²	ISO 179

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Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ISO 75-2/A
1.8 MPa, Unannealed	126	°C	
CLTE			ISO 11359-2
Flow : -30 to 65°C	6.1E-5	cm/cm/°C	
Transverse : -30 to 65°C	7.2E-5	cm/cm/°C	
RTI Elec	125	°C	UL 746B
RTI Imp	125	°C	UL 746B
RTI Str	125	°C	UL 746B
Heat Deflection Temperature - (1.8MPa, Unannealed)	130	°C	ASTM D648

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
Mold Temperature	60 to 100	°C

Notes

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

[2] 150x150x2 mm

[3] 4 mm