

**XYRON™ W5002**

Asahi Kasei Corporation - Polyphenylene Ether + PS

## General Information

**Product Description**

 Modified PPE  
 Unreinforced non-Flame retardant  
 Drinking water standard compliance: NSF, KTW-BWGL, ACS, WRAS

**General**

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Europe • Asia Pacific • North America
Features	• Drinking Water Contact Acceptable
Agency Ratings	• ACS • KTW • WRAS • DVGW W270 • NSF STD-61
Processing Method	• Injection Molding
Part Marking Code (ISO 11469)	• >PPE+PS<

 Properties <sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density	1.06	g/cm <sup>3</sup>	ISO 1183
Molding Shrinkage <sup>2</sup> (0.0787 in)	0.60 to 0.80	%	Internal Method
Water Absorption (24 hr, 73°F)	0.060	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Stress (Yield, 73°F)	9140	psi	ISO 527
Nominal Tensile Strain at Break (73°F)	7.0	%	ISO 527
Flexural Modulus (73°F)	377000	psi	ISO 178
Flexural Stress (73°F)	14500	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength <sup>3</sup> (73°F)	9.5	ft·lb/in <sup>2</sup>	ISO 179
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	237	°F	ISO 75-2/A
CLTE - Flow (-22 to 149°F)	3.9E-5	in/in/°F	ISO 11359-2
CLTE - Transverse (-22 to 149°F)	4.5E-5	in/in/°F	ISO 11359-2
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)	2.60		SPDR
Dissipation Factor (5.20 GHz)	2.0E-3		SPDR

## 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	464 to 554	°F
Mold Temperature	122 to 176	°F

## Notes

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

<sup>2</sup> 150x150x2 mm

<sup>3</sup> 4 mm
