XYRON™ DG141

Asahi Kasei Corporation - *Polyphenylene Sulfide + PPE*

General Information

Product Description			
Modified PPE PPS/PPE alloy 40% Filler reinforced Flame retardant V-0			
General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • North America	
Filler / Reinforcement	• Glass Fiber\Mineral, 40% Filler by Weight		
Additive	• Flame Retardant		
Features	• Flame Retardant • Gas Barrier	• Good Dimensional Stability • Low Fogging	• Low Warpage • Moisture Barrier
Processing Method	• Injection Molding		
Part Marking Code (ISO 11469)	• >PPS+PPE-(GF+MD)40<		

Properties [1]

Physical	**Nominal Value**	**Unit**	**Test Method**
Density	1.55	g/cm³	ISO 1183
Molding Shrinkage [2] (0.0787 in)	0.20 to 0.50	%	Internal Method
Outdoor Suitability (Black)	f1		UL 746C
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Stress (Yield, 73°F)	12800	psi	ISO 527
Tensile Strain (Break, 73°F)	1.0	%	ISO 527
Flexural Modulus (73°F)	1.86E+6	psi	ISO 178
Flexural Stress (73°F)	20900	psi	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength [3] (73°F)	1.4	ft·lb/in²	ISO 179
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (264 psi, Unannealed)	417	°F	ISO 75-2/A
CLTE - Flow (-22 to 149°F)	1.1E-5	in/in/°F	ISO 11359-2
CLTE - Transverse (-22 to 149°F)	2.3E-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)	3.80		SPDR
Dielectric Constant			IEC 60250
100 Hz	4.10		
1 MHz	4.10		
Dissipation Factor (5.20 GHz)	5.0E-3		SPDR
Dissipation Factor			IEC 60250
100 Hz	1.0E-3		
1 MHz	2.0E-3		
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating			UL 94
0.030 in	V-1		
0.08 in	• V-0 • 5VB		

Processing Information

Injection	Nominal Value	Unit
Drying Temperature - Hot Air Dryer	248	°F
Drying Time - Hot Air Dryer	3.0 to 4.0	hr
Processing (Melt) Temp	572 to 626	°F
Mold Temperature	248 to 302	°F

Notes

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

[2] 150x150x2 mm

[3] 4 mm