

XYRON™ AG511

Asahi Kasei Corporation - Polyamide + PPE

General Information
Product Description

 Modified PPE
 PA/PPE alloy
 10% Filler reinforced Non-Flame retardant

General

Material Status	<ul style="list-style-type: none"> Commercial: Active
Availability	<ul style="list-style-type: none"> Africa & Middle East Asia Pacific Europe North America
Filler / Reinforcement	<ul style="list-style-type: none"> Glass Fiber, 10% Filler by Weight
Processing Method	<ul style="list-style-type: none"> Injection Molding
Part Marking Code (ISO 11469)	<ul style="list-style-type: none"> >PA6+PPE-GF10<

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.17	g/cm ³	ISO 1183
Molding Shrinkage ² (0.118 in)	0.60 to 0.70	%	Internal Method
Mechanical	Nominal Value	Unit	Test Method
Tensile Stress (Yield, 73°F)	12900	psi	ISO 527
Tensile Strain (Break, 73°F)	3.0	%	ISO 527
Flexural Modulus (73°F)	609000	psi	ISO 178
Flexural Stress (73°F)	20200	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength ³ (73°F)	4.8	ft-lb/in ²	ISO 179
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	388	°F	ISO 75-2/B
CLTE - Flow (-22 to 149°F)	2.2E-5	in/in/°F	ISO 11359-2
CLTE - Transverse (-22 to 149°F)	5.5E-5	in/in/°F	ISO 11359-2
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity (73°F)	1.3E+16	ohms·cm	IEC 60093
Dielectric Constant (5.20 GHz)	3.00		SPDR
Dielectric Constant			IEC 60250
100 Hz	3.30		
1 MHz	3.10		
Dissipation Factor (5.20 GHz)	0.010		SPDR
Dissipation Factor			IEC 60250
100 Hz	6.0E-3		
1 MHz	0.011		

Processing Information

Injection	Nominal Value	Unit
Drying Temperature - Hot Air Dryer	212 to 266	°F
Drying Time - Hot Air Dryer	3.0 to 4.0	hr
Processing (Melt) Temp	500 to 572	°F
Mold Temperature	140 to 248	°F

Injection Notes

Recommended processing (melt) temperature of XYRON™ Polyamide + PPE is 280-300°C. Lower temperatures may lead to local degradation in properties due to non-uniform plasticization, while higher temperatures tend to cause silver streaking, other appearance problems and decomposition.

