

XYRON™ AG512

Asahi Kasei Corporation - Polyamide + PPE

General Information
Product Description

 Modified PPE
 PA/PPE alloy
 20% Filler reinforced Non-Flame retardant

General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Europe • Asia Pacific • North America
Filler / Reinforcement	• Glass Fiber, 20% Filler by Weight
Processing Method	• Injection Molding
Part Marking Code (ISO 11469)	• >PA6+PPE-GF20<

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.24	g/cm ³	ISO 1183
Molding Shrinkage ² (0.118 in)	0.20 to 0.60	%	Internal Method
Mechanical	Nominal Value	Unit	Test Method
Tensile Stress (Yield, 73°F)	18900	psi	ISO 527
Tensile Strain (Break, 73°F)	3.0	%	ISO 527
Flexural Modulus (73°F)	957000	psi	ISO 178
Flexural Stress (73°F)	28400	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)	408	°F	ISO 75-2/B
CLTE - Flow (-22 to 149°F)	1.6E-5	in/in/°F	ISO 11359-2
CLTE - Transverse (-22 to 149°F)	5.2E-5	in/in/°F	ISO 11359-2
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity (73°F)	7.1E+15	ohms·cm	IEC 60093
Dielectric Constant			IEC 60250
100 Hz	3.50		
1 MHz	3.30		
Dissipation Factor			IEC 60250
100 Hz	8.0E-3		
1 MHz	0.012		

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.

Notes

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

