

XYRON™ AF700

Asahi Kasei Corporation - Polyamide + PPE

General Information
Product Description

 Modified PPE
 PA/PPE alloy
 Flame retardant V-0
 Easy FLOW

General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Europe • Asia Pacific • North America
Features	• Flame Retardant • Halogen Free • High Flow
Processing Method	• Injection Molding
Part Marking Code (ISO 11469)	• >PA66+PPE-FR(40)<

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.12	g/cm ³	ISO 1183
Molding Shrinkage ² (0.118 in)	1.5 to 1.6	%	Internal Method
Mechanical	Nominal Value	Unit	Test Method
Tensile Stress (Yield, 73°F)	7830	psi	ISO 527
Tensile Strain (Break, 73°F)	44	%	ISO 527
Flexural Modulus (73°F)	392000	psi	ISO 178
Flexural Stress (73°F)	13300	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength ³ (73°F)	2.9	ft·lb/in ²	ISO 179
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	379	°F	ISO 75-2/B
CLTE - Flow (-22 to 149°F)	4.6E-5	in/in/°F	ISO 11359-2
CLTE - Transverse (-22 to 149°F)	4.9E-5	in/in/°F	ISO 11359-2
Electrical	Nominal Value	Unit	Test Method
Dielectric Constant (5.20 GHz)	2.90		SPDR
Dissipation Factor (5.20 GHz)	0.010		SPDR
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.06 in)	V-0		UL 94

Processing Information

Injection	Nominal Value	Unit
Drying Temperature - Hot Air Dryer	230 to 266	°F
Drying Time - Hot Air Dryer	2.0 to 4.0	hr
Processing (Melt) Temp	518 to 554	°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.

² 120x80x3 mm

³ 4 mm

