

【Inquiries】

AsahiKASEI Engineering Plastics Information Comprehensive Site
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AsahiKASEI



XYRON™ AF700

Asahi Kasei Corporation - Polyamide + PPE

Wednesday, February 28, 2024

General Information

Product Description

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

General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Asia Pacific • Europe • North America
Features AKEP website	• Flame Retardant • Flow, High • Halogen Free
Processing Method	• Injection Molding
Part Marking Code (ISO11469) (ISO 11469)	• >PA66+PPE-FR(40)<

Other Documentation

Literature

- [Molding Conditions](#)
- [SDS](#)
- [Technical Handbook](#)

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.12	g/cm ³	ISO 1183
Molding Shrinkage ² (3.00 mm)	1.5 to 1.6	%	Internal Method
Mechanical	Nominal Value	Unit	Test Method
Tensile Stress (Yield, 23°C)	54.0	MPa	ISO 527
Tensile Strain (Break, 23°C)	44	%	ISO 527
Flexural Modulus (23°C)	2700	MPa	ISO 178
Flexural Stress (23°C)	92.0	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength ³ (23°C)	6.0	kJ/m ²	ISO 179
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load 0.45 MPa, Unannealed	193	°C	ISO 75-2/B
CLTE			ISO 11359-2
Flow : -30 to 65°C	8.3E-5	cm/cm/°C	
Transverse : -30 to 65°C	8.8E-5	cm/cm/°C	

Disclaimer:

- Data shown are typical values obtained by proper testing methods and should not be used for specification purpose. Please use these data for selecting the most appropriate grade suitable for specific usage.

These data may be changed because of improvement in properties.

- Be sure to read the relevant SDS before handling and use, and always follow the Important Precautions.

- Do not use plastics in any of the following orally- or medically-related applications.

- Orally-related applications: any part, device or component which may come into direct oral contact or into direct contact with drinking foods or beverages.

For drinking water application, please consult Asahi Kasei Corporation.

- Medically-related applications: any part, device or component which may be used intracorporeally or which may in dialysis or other processes come into direct or indirect contact with body tissue, body fluids or transfusion fluids.

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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 (1.5 mm)	V-0		UL 94

Processing Information

Injection	Nominal Value	Unit
Drying Temperature - Hot Air Dryer	110 to 130	°C
Drying Time - Hot Air Dryer	2.0 to 4.0	hr
Processing (Melt) Temp	270 to 290	°C
Mold Temperature	60 to 120	°C

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

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