



LEONA™ FR370

Asahi Kasei Corporation - Polyamide 66

Saturday, January 18, 2025

General Information

General		
Material Status	• Commercial: Active	
Availability	• Africa & Middle East • Asia Pacific	• Europe • North America
Additive	• Flame Retardant	
Features AKEP website	• Flame Retardant	• Halogen Free
Uses	• Connectors • Electrical Parts	• Electrical/Electronic Applications • Switches
Part Marking Code (ISO11469) (ISO 11469)	• >PA66-FR(30)<	

Other Documentation

Literature	• Moldflow Data • Molding Conditions • SDS • Technical Handbook
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ASTM & ISO Properties¹

Physical	Dry	Conditioned	Unit	Test Method
Density / Specific Gravity	1.16	--	g/cm ³	ASTM D792 ISO 1183
Molding Shrinkage - Flow	0.90 to 1.6	--	%	Internal Method
Water Absorption				ISO 62
Equilibrium, 23°C, 50% RH	--	2.3	%	
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus (23°C)	3600	1600	MPa	ISO 527-1
Tensile Stress				
Yield, 23°C	83.0	55.0	MPa	ISO 527-2
Break, 23°C	80.0	--	MPa	ISO 527-2
--	83.0	58.0	MPa	ASTM D638
Tensile Strain				
Yield, 23°C	4.5	22	%	ISO 527-2
Break	7.0	70	%	ASTM D638
Break, 23°C	15	> 50	%	ISO 527-2
Flexural Modulus				
--	3300	1300	MPa	ASTM D790
23°C	3600	1500	MPa	ISO 178

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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Mechanical	Dry	Conditioned	Unit	Test Method
Flexural Strength				
--	128	56.0	MPa	ASTM D790
23°C	124	54.1	MPa	ISO 178
Taber Abrasion Resistance				ASTM D1044
1000 Cycles	--	7.00	mg	
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength	4.0	6.0	kJ/m ²	ISO 179
Charpy Unnotched Impact Strength	58 kJ/m ²	No Break		ISO 179
Notched Izod Impact	29	98	J/m	ASTM D256
Hardness	Dry	Conditioned	Unit	Test Method
Rockwell Hardness				ASTM D785
M-Scale	85	55		ISO 2039-2
R-Scale	120	110		
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load				
0.45 MPa, Unannealed	240	--	°C	ASTM D648
0.45 MPa, Unannealed	239	--	°C	ISO 75-2/B
1.8 MPa, Unannealed	80.0	--	°C	ASTM D648
1.8 MPa, Unannealed	78.0	--	°C	ISO 75-2/A
CLTE - Flow	7.0E-5	--	cm/cm/°C	ASTM D696
Electrical	Dry	Conditioned	Unit	Test Method
Surface Resistivity	1.0E+13	--	ohms	ASTM D257 IEC 60093
Volume Resistivity				
--	1.0E+14	--	ohms·cm	ASTM D257
23°C	1.0E+14	--	ohms·cm	IEC 60093
Dielectric Strength	31	--	kV/mm	ASTM D149 IEC 60243-1
Comparative Tracking Index				IEC 60112
3.00 mm	600	--	V	
Flammability	Dry	Conditioned	Unit	Test Method
Flame Rating (0.75 mm)	V-0	--		UL 94
Glow Wire Flammability Index				IEC 60695-2-12
3.0 mm	960	--	°C	
Oxygen Index	36	--	%	ASTM D2863

Processing Information

Injection	Dry	Unit
Drying Temperature - Vacuum Dryer	80 to 90	°C
Drying Time - Vacuum Dryer	2.0 to 3.0	hr
Processing (Melt) Temp	265 to 275	°C
Mold Temperature	75 to 85	°C

Notes

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

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