Asahi **KASEI** Leona[™] FR200

Asahi Kasei Chemicals Corporation - Polyamide 66

Friday, February 26, 2016

General Information					
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Material Status	Commercial: Active				
Availability	 Africa & Middle East Asia Pacific	EuropeNorth America			
Additive	Flame Retardant				
Features	Flame Retardant	Halogen Free			
Uses	ConnectorsElectrical Parts	Electrical/Electronic ApplicationsSwitches			

ASTM & ISO Properties ¹							
Physical	Dry	Conditioned	Unit	Test Method			
Specific Gravity	1.16		g/cm³	ASTM D792 ISO 1183			
Molding Shrinkage - Flow	1.3 to 2.0		%	Internal Method			
Water Absorption							
Saturation, 23°C		2.4	%				
Equilibrium, 23°C, 50% RH		2.4	%	ISO 62			
Mechanical	Dry	Conditioned	Unit	Test Method			
Tensile Modulus (23°C)	3500	1100	MPa	ISO 527-2			
Tensile Stress							
Yield, 23°C	75.0	44.0	MPa	ISO 527-2			
Break, 23°C	69.0		MPa	ISO 527-2			
	79.0	47.0	MPa	ASTM D638			
Tensile Strain							
Yield, 23°C	3.5	24	%	ISO 527-2			
Break	25	80	%	ASTM D638			
Break, 23°C	10	> 100	%	ISO 527-2			
Flexural Modulus							
	2900	1100	MPa	ASTM D790			
23°C	2900	1000	MPa	ISO 178			
Flexural Strength							
	118	44.0	MPa	ASTM D790			
23°C	117	37.2	MPa	ISO 178			
Taber Abrasion Resistance				ASTM D1044			
1000 Cycles		8.00	mg				
Impact	Dry	Conditioned	Unit	Test Method			
Charpy Notched Impact Strength	4.0	11	kJ/m²	ISO 179			
Charpy Unnotched Impact Strength	No Break	No Break		ISO 179			
Notched Izod Impact	29	120	J/m	ASTM D256			

Disclaimer:

⁻ Data shown are typical values obtained by proper testing methods and shoud 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 application : 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 Ksei Chemicals Corporation.
Medically-related applications : any part, 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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Hardness	Dry	Conditioned	Unit	Test Method
Rockwell Hardness				ASTM D785
M-Scale	80			ISO 2039-2
R-Scale	118	90		
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load				
0.45 MPa, Unannealed	209		°C	ASTM D648
0.45 MPa, Unannealed	203		°C	ISO 75-2/B
1.8 MPa, Unannealed	66.0		°C	ASTM D648
1.8 MPa, Unannealed	62.0		°C	ISO 75-2/A
CLTE - Flow	8.0E-5		cm/cm/°C	ASTM D696
Specific Heat	1670		J/kg/°C	
Thermal Conductivity	0.20		W/m/K	
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	19		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 (0.750 mm)	V-0			UL 94
Glow Wire Flammability Index				IEC 60695-2-1
3.00 mm	960		°C	
Oxygen Index	32		%	ASTM D2863

Notes

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

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