Leona™ FR200

Asahi Kasei Chemicals Corporation - Polyamide 66

Friday, February 26, 2016

General Information

General		
Material Status	• Commercial: Active	
Availability	• Africa & Middle East • Asia Pacific	• Europe • North America
Additive	• Flame Retardant	
Features	• Flame Retardant	• Halogen Free
Uses	• Connectors • Electrical Parts	• Electrical/Electronic Applications • Switches

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

Leona™ FR200

Asahi Kasei Chemicals Corporation - Polyamide 66

Hardness	Dry	Conditioned	Unit	Test Method
Rockwell Hardness				ASTM D785 ISO 2039-2
M-Scale	80	--		
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 60695-2-12
3.00 mm	960	--	°C	
Oxygen Index	32	--	%	ASTM D2863

Notes

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