

Leona™ 1700S

Asahi Kasei Corporation - Polyamide 66

General Information

General			
Features	• High Molecular Weight	• High Strength	• Medium Viscosity
Uses	• Film • Rods	• Sheet • Structural Parts	
Part Marking Code (ISO11469) (ISO 11469)	• >PA66<		

ASTM & ISO Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density / Specific Gravity	1.14	--	g/cm ³	ASTM D792 ISO 1183
Molding Shrinkage - Flow	1.3 to 2.0	--	%	Internal Method
Water Absorption Equilibrium, 23°C, 50% RH	--	2.5	%	ISO 62
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus (23°C)	3000	1100	MPa	ISO 527-1
Tensile Stress				
Yield, 23°C	84.0	50.0	MPa	ISO 527-2
--	80.0	59.0	MPa	ASTM D638
Tensile Strain				
Yield, 23°C	4.5	27	%	ISO 527-2
Break	100	300	%	ASTM D638
Break, 23°C	--	> 100	%	ISO 527-2
Flexural Modulus				
--	2800	1200	MPa	ASTM D790
23°C	2800	900	MPa	ISO 178
Flexural Strength				
--	118	54.0	MPa	ASTM D790
23°C	115	39.0	MPa	ISO 178
Taber Abrasion Resistance				ASTM D1044
1000 Cycles	--	4.00	mg	



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Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength	7.0	28	kJ/m ²	ISO 179
Charpy Unnotched Impact Strength	No Break	No Break		ISO 179
Notched Izod Impact	49	250	J/m	ASTM D256
Hardness	Dry	Conditioned	Unit	Test Method
Rockwell Hardness				ASTM D785 ISO 2039-2
M-Scale	80	55		
R-Scale	120	105		
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load				
0.45 MPa, Unannealed	230	--	°C	ASTM D648
0.45 MPa, Unannealed	215	--	°C	ISO 75-2/B
1.8 MPa, Unannealed	70.0	--	°C	ASTM D648 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+14	--	ohms	ASTM D257 IEC 60093
Volume Resistivity				
--	1.0E+15	--	ohms·cm	ASTM D257
23°C	1.0E+15	--	ohms·cm	IEC 60093
Dielectric Strength	20	--	kV/mm	ASTM D149 IEC 60243-1
Flammability	Dry	Conditioned	Unit	Test Method
Oxygen Index	23	--	%	ASTM D2863

Notes

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

