

**LEONA™ 1700S**

Asahi Kasei Corporation - Polyamide 66

**General Information**

General	
Material Status	<ul style="list-style-type: none"> <li>Commercial: Active</li> </ul>
Availability	<ul style="list-style-type: none"> <li>Africa &amp; Middle East</li> <li>Asia Pacific</li> <li>Europe</li> <li>North America</li> </ul>
Features	<ul style="list-style-type: none"> <li>High Viscosity</li> </ul>
Uses	<ul style="list-style-type: none"> <li>Film</li> <li>Rods</li> <li>Sheet</li> <li>Structural Parts</li> </ul>
Part Marking Code (ISO 11469)	<ul style="list-style-type: none"> <li>&gt;PA66&lt;</li> </ul>

**Properties <sup>1</sup>**

Physical	Dry	Conditioned	Unit	Test Method
Density / Specific Gravity	1.14	--		ASTM D792
Density	1.14	--	g/cm <sup>3</sup>	ISO 1183
Molding Shrinkage - Flow	1.3 to 2.0	--	%	Internal Method
Water Absorption (Equilibrium, 73°F, 50% RH)	--	2.5	%	ISO 62
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus (73°F)	435000	160000	psi	ISO 527-1
Tensile Strength	11600	8560	psi	ASTM D638
Tensile Stress (Yield, 73°F)	12200	7250	psi	ISO 527-2
Tensile Strain (Yield, 73°F)	4.5	27	%	ISO 527-2
Tensile Elongation (Break)	100	300	%	ASTM D638
Tensile Strain (Break, 73°F)	--	> 100	%	ISO 527-2
Flexural Modulus	406000	174000	psi	ASTM D790
Flexural Modulus (73°F)	406000	131000	psi	ISO 178
Flexural Strength	17100	7830	psi	ASTM D790
Flexural Stress (73°F)	16700	5660	psi	ISO 178
Taber Abrasion Resistance (1000 Cycles)	--	4.00	mg	ASTM D1044
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength	3.3	13	ft·lb/in <sup>2</sup>	ISO 179
Charpy Unnotched Impact Strength	No Break	No Break		ISO 179
Notched Izod Impact	0.92	4.6	ft·lb/in	ASTM D256
Hardness	Dry	Conditioned	Unit	Test Method
Rockwell Hardness				ASTM D785
M-Scale	80	55		
R-Scale	120	105		
Rockwell Hardness				ISO 2039-2
M-Scale	80	55		
R-Scale	120	105		
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	446	--	°F	ASTM D648
Deflection Temperature Under Load (66 psi, Unannealed)	419	--	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	158	--	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	158	--	°F	ISO 75-2/A
CLTE - Flow	4.4E-5	--	in/in/°F	ASTM D696
Specific Heat	0.399	--	Btu/lb/°F	
Thermal Conductivity	1.4	--	Btu·in/hr/ft <sup>2</sup> /°F	
Electrical	Dry	Conditioned	Unit	Test Method



Surface Resistivity	1.0E+14	--	ohms	ASTM D257
Surface Resistivity	1.0E+14	--	ohms	IEC 60093
Volume Resistivity	1.0E+15	--	ohms·cm	ASTM D257
Volume Resistivity (73°F)	1.0E+15	--	ohms·cm	IEC 60093
Dielectric Strength	510	--	V/mil	ASTM D149
Electric Strength	510	--	V/mil	IEC 60243-1
<b>Flammability</b>	<b>Dry</b>	<b>Conditioned</b>	<b>Unit</b>	<b>Test Method</b>
Oxygen Index	23	--	%	ASTM D2863

### Processing Information

<b>Injection</b>	<b>Dry Unit</b>
Drying Temperature - Vacuum Dryer	176 to 194 °F
Drying Time - Vacuum Dryer	2.0 to 3.0 hr
Processing (Melt) Temp	518 to 554 °F
Mold Temperature	167 to 185 °F

### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.

