

LEONA™ 1500

Asahi Kasei Corporation - Polyamide 66

General Information

General	
Material Status	• Commercial: Active
Availability	• Africa & Middle East • Europe • Asia Pacific • North America
Features	• Medium Viscosity
Uses	• Fasteners • Sheet • Industrial Applications • Structural Parts
Part Marking Code (ISO 11469)	• >PA66<

Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density / Specific Gravity	1.14	--		ASTM D792
Density	1.14	--	g/cm ³	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)	421000	145000	psi	ISO 527-1
Tensile Strength	11500	8270	psi	ASTM D638
Tensile Stress (Yield, 73°F)	12200	7400	psi	ISO 527-2
Tensile Strain (Yield, 73°F)	4.5	26	%	ISO 527-2
Tensile Elongation (Break)	80	270	%	ASTM D638
Tensile Strain (Break, 73°F)	--	> 100	%	ISO 527-2
Flexural Modulus	406000	174000	psi	ASTM D790
Flexural Modulus (73°F)	392000	131000	psi	ISO 178
Flexural Strength	17100	7830	psi	ASTM D790
Flexural Stress (73°F)	16000	5660	psi	ISO 178
Taber Abrasion Resistance (1000 Cycles)	--	5.00	mg	ASTM D1044
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength	2.4	14	ft·lb/in ²	ISO 179
Charpy Unnotched Impact Strength	No Break	No Break		ISO 179
Notched Izod Impact	0.92	3.3	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)	383	--	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	158	--	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	149	--	°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 ² /°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
Comparative Tracking Index (0.118 in)	600	--	V	IEC 60112

Processing Information				
Injection			Dry Unit	
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

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

