LEONA™ 1402S

Asahi Kasei Corporation - *Polyamide 66*

General Information

General		
Material Status	• Commercial: Active	
Availability	• Africa & Middle East • Asia Pacific	• Europe • North America
Additive	• Heat Stabilizer	
Features	• Heat Stabilized	
Uses	• Automotive Applications • Connectors	• Consumer Applications • Wire & Cable Applications
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/cm³	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	174000	psi	ISO 527-1
Tensile Strength	11500	8270	psi	ASTM D638
Tensile Stress (Yield, 73°F)	11900	7540	psi	ISO 527-2
Tensile Strain (Yield, 73°F)	4.0	24	%	ISO 527-2
Tensile Elongation (Break)	50	250	%	ASTM D638
Tensile Strain (Break, 73°F)	--	> 100	%	ISO 527-2
Flexural Modulus	406000	174000	psi	ASTM D790
Flexural Modulus (73°F)	392000	160000	psi	ISO 178
Flexural Strength	17100	7830	psi	ASTM D790
Flexural Stress (73°F)	16400	6090	psi	ISO 178
Taber Abrasion Resistance (1000 Cycles)	--	7.00	mg	ASTM D1044
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Charpy Notched Impact Strength	2.9	7.1	ft·lb/in²	ISO 179
Charpy Unnotched Impact Strength	No Break	No Break		ISO 179
Notched Izod Impact	0.73	2.8	ft·lb/in	ASTM D256
Hardness	**Dry**	**Conditioned**	**Unit**	**Test Method**
Rockwell Hardness				ASTM D785
M-Scale	80	55		
R-Scale	120	108		
Rockwell Hardness				ISO 2039-2
M-Scale	80	55		
R-Scale	120	108		
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Deflection Temperature Under Load (66 psi, Unannealed)	446	--	°F	ASTM D648
Deflection Temperature Under Load (66 psi, Unannealed)	374	--	°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/ft²/°F	

Electrical	Dry	Conditioned	Unit	Test Method
Surface Resistivity	1.0E+13	--	ohms	ASTM D257
Surface Resistivity	1.0E+13	--	ohms	IEC 60093
Volume Resistivity	1.0E+14	--	ohms·cm	ASTM D257
Volume Resistivity (73°F)	1.0E+14	--	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)	525	--	V	IEC 60112
Flammability	**Dry**	**Conditioned**	**Unit**	**Test Method**
Flame Rating (0.030 in)	V-2	--		UL 94
Glow Wire Flammability Index (0.12 in)	1760	--	°F	IEC 60695-2-12
Oxygen Index	26	--	%	ASTM D2863

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.