LEONA™ CR301

Asahi Kasei Corporation - *Polyamide 66*

General Information

General		
Material Status	• Commercial: Active	
Availability	• Africa & Middle East • Asia Pacific	• Europe • North America
Filler / Reinforcement	• Mineral, 40% Filler by Weight	
Features	• Low Warpage	
Uses	• Electrical Parts • Electrical/Electronic Applications	• Industrial Applications • Switches
Part Marking Code (ISO 11469)	• >PA66-MD40<	

Properties [1]

Physical	Dry	Conditioned	Unit	Test Method
Density / Specific Gravity	1.48	--		ASTM D792
Density	1.48	--	g/cm³	ISO 1183
Molding Shrinkage - Flow	0.50 to 1.3	--	%	Internal Method
Water Absorption (Equilibrium, 73°F, 50% RH)	--	1.5	%	ISO 62
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus (73°F)	1.02E+6	595000	psi	ISO 527-1
Tensile Strength	12800	9280	psi	ASTM D638
Tensile Stress (Break, 73°F)	12300	8560	psi	ISO 527-2
Tensile Elongation (Break)	3.0	3.5	%	ASTM D638
Tensile Strain (Break, 73°F)	2.0	11	%	ISO 527-2
Flexural Modulus	856000	421000	psi	ASTM D790
Flexural Modulus (73°F)	1.07E+6	595000	psi	ISO 178
Flexural Strength	21300	13500	psi	ASTM D790
Flexural Stress (73°F)	20300	13300	psi	ISO 178
Taber Abrasion Resistance (1000 Cycles)	--	8.00	mg	ASTM D1044
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Charpy Notched Impact Strength	1.4	1.4	ft·lb/in²	ISO 179
Charpy Unnotched Impact Strength	24	43	ft·lb/in²	ISO 179
Notched Izod Impact	0.64	0.73	ft·lb/in	ASTM D256
Hardness	**Dry**	**Conditioned**	**Unit**	**Test Method**
Rockwell Hardness (M-Scale)	85	--		ASTM D785
Rockwell Hardness (M-Scale)	85	--		ISO 2039-2
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Deflection Temperature Under Load (66 psi, Unannealed)	482	--	°F	ASTM D648
Deflection Temperature Under Load (66 psi, Unannealed)	480	--	°F	ISO 75-2/B
CLTE - Flow	2.2E-5	--	in/in/°F	ASTM D696

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	527 to 563	°F
Mold Temperature	167 to 185	°F