Product Comparison

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Technical Data

Product Description

Lumid® HI5006A	Dimensional Stability Application Pipe Fitting, Electrical & Electronic Parts Material Type PA6/ABS
Generic Nylon 6+ABS	This data represents typical values that have been calculated from all products classified as: Generic Nylon 6+ABS This information is provided for comparative purposes only.

General	Lumid® HI5006A	Generic Nylon 6+ABS
Manufacturer / Supplier	• LG Chem Ltd.	• Generic
Generic Symbol	• Nylon 6+ABS	• Nylon 6+ABS
Material Status	• Commercial: Active	• Commercial: Active
UL Yellow Card [1]	• E67171-101743135	--
Search for UL Yellow Card	• LG Chem Ltd. • Lumid®	--
Availability	• Asia Pacific • Europe • Latin America • North America	• Africa & Middle East • Asia Pacific • Europe • Latin America • North America
Features	• Good Dimensional Stability	--
Uses	• Electrical/Electronic Applications • Fittings	--

Physical	Lumid® HI5006A	Generic Nylon 6+ABS	Unit	Test Method
Density / Specific Gravity				
--	1.06	--		ASTM D792
--	--	1.04 to 1.08	g/cm³	ISO 1183
Molding Shrinkage				
Flow : 0.126 in	8.0E-3 to 0.012	--	in/in	ASTM D955
--	--	0.64 to 1.0	%	ISO 294-4
Flow : 0.126 in	0.80 to 1.2	--	%	ISO 294-4
Water Absorption (24 hr, 73°F, 50% RH)	0.70	--	%	ASTM D570

Mechanical	Lumid® HI5006A	Generic Nylon 6+ABS	Unit	Test Method
Tensile Modulus	--	258000 to 322000	psi	ISO 527-1
Tensile Strength				
Yield, 0.126 in [3]	6400	--	psi	ASTM D638
Yield	6240	--	psi	ISO 527-2/50
--	--	5730 to 5920	psi	ISO 527-2

Form No. TDS-348990-118341-en
Document Created: Sunday, February 18, 2024

Mechanical	Lumid® HI5006A	Generic Nylon 6+ABS	Unit	Test Method
Tensile Strain				
Yield	60	--	%	ISO 527-2/50
Break, 0.126 in [3]	100	--	%	ASTM D638
Break	--	50 to 95	%	ISO 527-2
Flexural Modulus				
0.252 in [4]	228000	--	psi	ASTM D790
--	--	189000 to 312000	psi	ISO 178
-- [5]	247000	--	psi	ISO 178
Flexural Strength				
0.252 in [4]	8530	--	psi	ASTM D790
-- [5]	8700	--	psi	ISO 178

Impact	Lumid® HI5006A	Generic Nylon 6+ABS	Unit	Test Method
Charpy Notched Impact Strength				ISO 179
--	--	4.0 to 40	ft·lb/in²	
73°F	33	--	ft·lb/in²	
Notched Izod Impact				
73°F, 0.252 in	13	--	ft·lb/in	ASTM D256
--	--	26 to 29	ft·lb/in²	ISO 180
73°F	30	--	ft·lb/in²	ISO 180

Thermal	Lumid® HI5006A	Generic Nylon 6+ABS	Unit	Test Method
Deflection Temperature Under Load				
66 psi, Unannealed	230	--	°F	ASTM D648
264 psi, Unannealed	176	--	°F	ASTM D648
264 psi, Unannealed	--	143 to 150	°F	ISO 75-2/A
Vicat Softening Temperature	--	216 to 356	°F	ISO 306
Peak Melting Temperature	428	--	°F	ASTM D3418
CLTE - Flow	4.4E-5	--	in/in/°F	ASTM D696

Electrical	Lumid® HI5006A	Generic Nylon 6+ABS	Unit	Test Method
Volume Resistivity (73°F)	1.0E+17	--	ohms·cm	ASTM D257
Dielectric Strength (73°F, 0.0394 in)	660	--	V/mil	ASTM D149
Dielectric Constant (73°F, 1.00 GHz)	2.90	--		ASTM D150

Injection	Lumid® HI5006A	Generic Nylon 6+ABS	Unit
Drying Temperature	158 to 194	176 to 212	°F
Drying Time	4.0 to 5.0	2.5 to 3.6	hr
Suggested Max Moisture	0.10	--	%
Rear Temperature	455 to 482	455 to 473	°F
Middle Temperature	464 to 500	464 to 482	°F
Front Temperature	464 to 500	464 to 483	°F
Nozzle Temperature	482 to 509	--	°F
Processing (Melt) Temp	482 to 509	464 to 496	°F
Mold Temperature	176 to 212	122 to 176	°F

Form No. TDS-348990-118341-en
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Injection	Lumid® HI5006A	Generic Nylon 6+ABS	Unit
Screw Speed	60 to 200	--	rpm
Injection Notes			

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Notes

[1] A UL Yellow Card contains UL-verified flammability and electrical characteristics. UL Prospector continually works to link Yellow Cards to individual plastic materials in Prospector, however this list may not include all of the appropriate links. It is important that you verify the association between these Yellow Cards and the plastic material found in Prospector. For a complete listing of Yellow Cards, visit the UL Yellow Card Search.

[2] Typical properties: these are not to be construed as specifications.

[3] 2.0 in/min

[4] 0.12 in/min

[5] 0.079 in/min

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