LG ABS PI641

Acrylonitrile Butadiene Styrene

LG Chem Ltd.

Message:

LG ABS PI641 is an acrylonitrile butadiene styrene (ABS) material. This product is available in North America, Latin America, Europe or Asia Pacific. The processing method is extrusion. The main characteristics of LG ABS PI641 are: impact resistance.
The typical application fields of LG ABS PI641 are: engineering/industrial accessories

General Information			
Features	Impact resistance, high General		
Uses	Accessories		
Forms	Particle		
Processing Method	Extrusion		
Multi-Point Data	Specific Heat vs. Temperature (ISO 11403-2)		
Physical	**Nominal Value**	**Unit**	**Test Method**
Specific Gravity			
--	1.04	g/cm³	ASTM D792
--	1060	kg/m³	ISO 1183 [1]
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	8.0	g/10 min	ASTM D1238
Melt volume-flow rate (220°C/10.0 kg)	7.60	cm³/10min	ISO 1133 [2]
Molding Shrinkage - Flow (3.20 mm)	0.40 - 0.70	%	ASTM D955
Water Absorption (Saturation)	0.22	%	ISO 62 [3]
Hardness	**Nominal Value**	**Unit**	**Test Method**
Rockwell Hardness (R-Scale)	100		ASTM D785
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	2200	MPa	ISO 527-2 [4]
Tensile Strength			
Yield, 3.20mm [5]	45.1	MPa	ASTM D638
Yield	44.0	MPa	ISO 527-2 [6]
Tensile Elongation			
Yield, 3.20mm [7]	> 5.0	%	ASTM D638
Yield	5.0	%	ISO 527-2 [8]
Fracture, 3.20mm [9]	20	%	ASTM D638
Tensile Elongation at Break	14	%	ISO 527-2 [10]
Flexural Modulus [11] (3.20 mm)	2300	MPa	ASTM D790
Flexural Strength [12] (3.20 mm)	68.6	MPa	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength			ISO 179/1eA [13]

-30°C	39.6	kJ/m²	ISO 179/1eA
23°C	56.5	kJ/m²	ISO 179/1eA
Charpy impact strength			ISO 179/1eU [14]
-30°C	No Break		ISO 179/1eU
23°C	No Break		ISO 179/1eU
Notched Izod Impact			ASTM D256
23°C, 3.20 mm	440	J/m	ASTM D256
23°C, 6.40 mm	410	J/m	ASTM D256
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load			ASTM D648
0.45 MPa, unannealed, 9.40mm	91.0	°C	ASTM D648
1.8 MPa, unannealed, 634 mm	86.0	°C	ASTM D648
Glass Transition Temperature [15]	110	°C	ISO 11357-2 [16]
Vicat Softening Temperature			
--	94.0	°C	ASTM D1525 [17]
50°C/h, B (50N)	93.4	°C	ISO 306 [18]
Linear expansion coefficient			ISO 11359-2 [19]
Flow	9.4E-5	cm/cm/°C	ISO 11359-2
Lateral	7.3E-5	cm/cm/°C	ISO 11359-2
Electrical	**Nominal Value**	**Unit**	**Test Method**
Surface Resistivity	> 1.0E+15	ohms	IEC 60093 [20]
Volume Resistivity	> 1.0E+13	ohms·m	IEC 60093 [21]
Relative Permittivity (1 MHz)	2.90		IEC 60250 [22]
Dissipation Factor (1 MHz)	0.013		IEC 60250 [23]
Flammability	**Nominal Value**	**Unit**	**Test Method**
Burning Behav. at thickness h (3.20 mm, UL)	HB		ISO 1210 [24]
Extrusion	**Nominal Value**	**Unit**	
Drying Temperature	70.0 - 80.0	°C	
Drying Time	3.0 - 4.0	hr	
Cylinder Zone 1 Temp.	180 - 210	°C	
Cylinder Zone 2 Temp.	190 - 230	°C	
Cylinder Zone 3 Temp.	200 - 250	°C	
Cylinder Zone 4 Temp.	200 - 250	°C	
Adapter Temperature	200 - 250	°C	
Melt Temperature	200 - 250	°C	
Die Temperature	200 - 250	°C	
Extrusion instructions			
Minimum Moisture Content: 0.01%Roll Stack Temperature, Top: 70 to 100°CRoll Stack Temperature, Middle: 70 to 90°CRoll Stack Temperature, Bottom: 60 to 90°C			
NOTE			
1.	??????,?? ISO 10350 ??? 23°C/50%r.h. ???		

2.	??????,?? ISO 10350 ??? 23°C/50%r.h. ???
3.	??????,?? ISO 10350 ??? 23°C/50%r.h. ???
4.	??????,?? ISO 10350 ??? 23°C/50%r.h. ???
5.	50 mm/min
6.	??????,?? ISO 10350 ??? 23°C/50%r.h. ???
7.	50 mm/min
8.	??????,?? ISO 10350 ??? 23°C/50%r.h. ???
9.	50 mm/min
10.	??????,?? ISO 10350 ??? 23°C/50%r.h. ???
11.	15 mm/min
12.	15 mm/min
13.	??????,?? ISO 10350 ??? 23°C/50%r.h. ???
14.	??????,?? ISO 10350 ??? 23°C/50%r.h. ???
15.	10 °C/min
16.	??????,?? ISO 10350 ??? 23°C/50%r.h. ???
17.	速率 A (50°C/h), 载荷2 (50N)
18.	??????,?? ISO 10350 ??? 23°C/50%r.h. ???
19.	??????,?? ISO 10350 ??? 23°C/50%r.h. ???
20.	??????,?? ISO 10350 ??? 23°C/50%r.h. ???
21.	??????,?? ISO 10350 ??? 23°C/50%r.h. ???
22.	??????,?? ISO 10350 ??? 23°C/50%r.h. ???
23.	??????,?? ISO 10350 ??? 23°C/50%r.h. ???
24.	??????,?? ISO 10350 ??? 23°C/50%r.h. ???

Recommended distributors for this material

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