LG ABS RX710

Acrylonitrile Butadiene Styrene

LG Chem Ltd.

Message:

LG ABS RX710 is an acrylonitrile butadiene styrene (ABS) material. This product is available in North America, Latin America, Europe or Asia Pacific. The processing method is injection molding.
The main features of LG ABS RX710 are:
flame retardant/rated flame
Impact resistance

General Information			
UL YellowCard	E67171-248403		
Features	Impact resistance, high		
Processing Method	Injection molding		
Multi-Point Data	Specific Heat vs. Temperature (ISO 11403-2)		
Physical	**Nominal Value**	**Unit**	**Test Method**
Specific Gravity			
--	1.04	g/cm³	ASTM D792
--	1030	kg/m³	ISO 1183 [1]
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	37	g/10 min	ASTM D1238
Melt volume-flow rate (220°C/10.0 kg)	18.2	cm³/10min	ISO 1133 [2]
Molding Shrinkage - Flow (3.20 mm)	0.40 - 0.70	%	ASTM D955
Water Absorption (Saturation)	0.23	%	ISO 62 [3]
Hardness	**Nominal Value**	**Unit**	**Test Method**
Rockwell Hardness (R-Scale)	97		ASTM D785
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	2000	MPa	ISO 527-2 [4]
Tensile Strength			
Yield, 3.20mm [5]	38.2	MPa	ASTM D638
Yield	37.0	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]	30	%	ASTM D638
Tensile Elongation at Break	19	%	ISO 527-2 [10]
Flexural Modulus [11] (3.20 mm)	1860	MPa	ASTM D790
Flexural Strength [12] (3.20 mm)	56.9	MPa	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength			ISO 179/1eA [13]
-30°C	29.6	kJ/m²	ISO 179/1eA
23°C	56.6	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	590	J/m	ASTM D256
23°C, 6.40 mm	290	J/m	ASTM D256
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load			ASTM D648
0.45 MPa, unannealed, 6.40mm	90.0	°C	ASTM D648
1.8 MPa, unannealed, 6.40mm	84.0	°C	ASTM D648
Glass Transition Temperature [15]	110	°C	ISO 11357-2 [16]
Vicat Softening Temperature			
--	91.0	°C	ASTM D1525 [17]
50°C/h, B (50N)	94.8	°C	ISO 306 [18]
Linear expansion coefficient			ISO 11359-2 [19]
Flow	9.2E-5	cm/cm/°C	ISO 11359-2
Lateral	7.2E-5	cm/cm/°C	ISO 11359-2
RTI Elec			UL 746
1.70 mm	60.0	°C	UL 746
3.00 mm	60.0	°C	UL 746
RTI Imp			UL 746
1.70 mm	60.0	°C	UL 746
3.00 mm	60.0	°C	UL 746
RTI			UL 746
1.70 mm	60.0	°C	UL 746
3.00 mm	60.0	°C	UL 746
Electrical	**Nominal Value**	**Unit**	**Test Method**
Surface Resistivity	1.8E+14	ohms	IEC 60093 [20]
Volume Resistivity	> 1.0E+13	ohms·m	IEC 60093 [21]
Electric strength	42	kV/mm	IEC 60243-1 [22]
Arc Resistance	PLC 5		ASTM D495
Comparative Tracking Index (CTI)	PLC 0		UL 746
High Amp Arc Ignition (HAI)			UL 746
1.70 mm	PLC 0		UL 746
3.00 mm	PLC 0		UL 746
High Voltage Arc Tracking Rate (HVTR)	PLC 1		UL 746
Hot-wire Ignition (HWI)			UL 746
1.70 mm	PLC 4		UL 746
3.00 mm	PLC 3		UL 746
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating			UL 94
1.70 mm, ALL	HB		UL 94

3.00 mm, ALL	HB	UL 94
Burning Behav. at thickness h (3.20 mm, UL)	HB	ISO 1210 [23]

Injection	Nominal Value	Unit
Drying Temperature	70.0 - 80.0	°C
Drying Time	3.0 - 4.0	hr
Rear Temperature	180 - 200	°C
Middle Temperature	190 - 230	°C
Front Temperature	200 - 250	°C
Nozzle Temperature	200 - 250	°C
Processing (Melt) Temp	200 - 250	°C
Mold Temperature	40.0 - 80.0	°C
Back Pressure	0.490 - 0.981	MPa
Screw Speed	50 - 100	rpm

Injection instructions
Minimum Moisture Content: 0.01%

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. ???

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China