

LG ABS BM662B

LG Chem Ltd. - Acrylonitrile Butadiene Styrene

Friday, May 24, 2019

General Information

Product Description

Description

- Blow Molding, Heat Resistance

Application

- Automotives Exterior Housing (Spoiler, Bumper Guard etc)

General

Material Status	• Commercial: Active
Availability	• Asia Pacific • Europe • Latin America • North America
Features	• Good Heat Resistance
Uses	• Automotive Applications • Automotive Bumper • Automotive Exterior Parts • Housings
Processing Method	• Blow Molding

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity ²	1.05	g/cm ³	ASTM D792
Density (23°C)	1.06	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	2.0	g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	2.0	g/10 min	ISO 1133
Molding Shrinkage - Flow (23°C, 3.20 mm, Injection Molded)	0.40 to 0.70	%	ASTM D955
Molding Shrinkage - Flow ³ (23°C, 3.20 mm)	0.40 to 0.70	%	ISO 294-4
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus ⁴ (23°C, 3.20 mm, Injection Molded)	1900	MPa	ASTM D638
Tensile Modulus (23°C, 4.00 mm, Injection Molded)	1900	MPa	ISO 527-2/50
Tensile Strength ⁴ (Yield, 3.20 mm, Injection Molded)	46.0	MPa	ASTM D638
Tensile Stress			ISO 527-2/50
Yield, 23°C, 4.00 mm, Injection Molded	45.0	MPa	
Tensile Strain			ISO 527-2/50
Yield, 23°C, 4.00 mm, Injection Molded	> 5.0	%	
Tensile Elongation ⁴			ASTM D638
Break, 23°C, 3.20 mm, Injection Molded	> 10	%	
Tensile Strain			ISO 527-2/50
Break, 23°C, 4.00 mm, Injection Molded	> 10	%	
Flexural Modulus ⁵ (23°C, 3.20 mm)	2050	MPa	ASTM D790
Flexural Modulus ⁶ (23°C, 4.00 mm, Injection Molded)	1950	MPa	ISO 178
Flexural Strength ⁵ (23°C, 3.20 mm, Injection Molded)	70.0	MPa	ASTM D790
Flexural Stress ⁶ (23°C, 4.00 mm, Injection Molded)	72.0	MPa	ISO 178

UL and the UL logo are trademarks of UL LLC © 2019. All Rights Reserved.

The information presented here was acquired by UL from the producer of the product or material or original information provider. However, UL assumes no responsibility or liability for the accuracy of the information contained on this website and strongly encourages that upon final product or material selection information is validated with the manufacturer. This website provides links to other websites owned by third parties. The content of such third party sites is not within our control, and we cannot and will not take responsibility for the information or content.

LG ABS BM662B

LG Chem Ltd. - Acrylonitrile Butadiene Styrene

Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength ⁷			ISO 179/1eA
-30°C, Injection Molded	7.0	kJ/m ²	
23°C, Injection Molded	15	kJ/m ²	
Notched Izod Impact			ASTM D256
-30°C, 3.20 mm, Injection Molded	70	J/m	
-30°C, 6.40 mm, Injection Molded	60	J/m	
23°C, 3.20 mm, Injection Molded	160	J/m	
23°C, 6.40 mm, Injection Molded	160	J/m	
Notched Izod Impact Strength ⁷			ISO 180/1A
-30°C, Injection Molded	7.0	kJ/m ²	
23°C, Injection Molded	16	kJ/m ²	
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale, 23°C, Injection Molded)	100		ASTM D785
Rockwell Hardness (R-Scale)	100		ISO 2039-2
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
1.8 MPa, Unannealed, 6.40 mm	103	°C	
Heat Deflection Temperature ³			ISO 75-2/Ae
1.8 MPa, Unannealed, 4.00 mm	93.0	°C	
Vicat Softening Temperature	110	°C	ASTM D1525 ⁸
Vicat Softening Temperature	110	°C	ISO 306/B50

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	80 to 90	°C
Drying Time	3.0 to 4.0	hr
Suggested Max Moisture	0.050	%
Rear Temperature	180 to 200	°C
Middle Temperature	200 to 220	°C
Front Temperature	220 to 230	°C
Nozzle Temperature	220 to 230	°C
Processing (Melt) Temp	220 to 250	°C
Mold Temperature	40 to 60	°C
Back Pressure ⁹	0.981 to 2.94	MPa
Extrusion	Nominal Value	Unit
Drying Temperature	80 to 90	°C
Drying Time	3.0 to 4.0	hr
Cylinder Zone 1 Temp.	180 to 200	°C
Cylinder Zone 2 Temp.	190 to 210	°C
Cylinder Zone 3 Temp.	190 to 210	°C
Cylinder Zone 4 Temp.	200 to 220	°C
Adapter Temperature	220	°C
Melt Temperature	200 to 210	°C
Die Temperature	220	°C

UL and the UL logo are trademarks of UL LLC © 2019. All Rights Reserved.

The information presented here was acquired by UL from the producer of the product or material or original information provider. However, UL assumes no responsibility or liability for the accuracy of the information contained on this website and strongly encourages that upon final product or material selection information is validated with the manufacturer. This website provides links to other websites owned by third parties. The content of such third party sites is not within our control, and we cannot and will not take responsibility for the information or content.

LG ABS BM662B

LG Chem Ltd. - Acrylonitrile Butadiene Styrene

Notes

¹ Typical properties: these are not to be construed as specifications.

² 23°C

³ Injection Molded

⁴ 50 mm/min

⁵ 15 mm/min

⁶ 2.0 mm/min

⁷ 4mm

⁸ Rate A (50°C/h), Loading 2 (50 N)

⁹ Hydraulic Type
