

# LG ABS MRC380L5

LG Chem Ltd. - Acrylonitrile Butadiene Styrene

Saturday, October 12, 2024

## General Information

### Product Description

#### Description

MRC380L5, a Post-Consumer Recycled ABS product for injection molding, contains 50% PCR resin and is designed to carry out light colors with the same physical properties as high-flow standard ABS. (Early stage of development : The data can be changed as a result of the quality improvement of the products)

#### Key Features

Recycled ABS (PCR 50%), High Flow

#### Application

Electrical/Electronic Products, Miscellaneous Goods

### General

Material Status	• Commercial: Active
Availability	• Asia Pacific • Europe • Latin America • North America
Recycled Content	• Post-Consumer (PCR), 50%
Features	• High Flow
Uses	• Electrical/Electronic Applications
Processing Method	• Injection Molding

## ASTM & ISO Properties

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity <sup>1</sup>	1.04 to 1.08	g/cm <sup>3</sup>	ASTM D792
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	36	g/10 min	ASTM D1238
Molding Shrinkage - Flow (23°C, 3.20 mm, Injection Molded)	0.40 to 0.70	%	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength <sup>2</sup>			ASTM D638
Yield, 23°C, 3.20 mm, Injection Molded	40.0	MPa	
Tensile Elongation <sup>2</sup>			ASTM D638
Break, 23°C, 3.20 mm, Injection Molded	> 10	%	
Flexural Modulus <sup>3</sup> (23°C, 6.40 mm, Injection Molded)	2250	MPa	ASTM D790
Flexural Strength <sup>3</sup> (23°C, 6.40 mm, Injection Molded)	65.0	MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact			ASTM D256
23°C, 3.20 mm, Injection Molded	240	J/m	
23°C, 6.40 mm, Injection Molded	200	J/m	
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale, 23°C, Injection Molded)	101		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load <sup>4</sup>			ASTM D648
1.8 MPa, Unannealed, 6.40 mm, Injection Molded	85.0	°C	

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Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
1.5 mm		HB	
3.0 mm		HB	

### Processing Information

Injection	Nominal Value	Unit
Drying Temperature	70 to 80	°C
Drying Time	3.0 to 4.0	hr
Processing (Melt) Temp	190 to 220	°C
Mold Temperature	40 to 80	°C
Screw Speed	30 to 60	rpm

### Notes

<sup>1</sup> 23°C

<sup>2</sup> 50 mm/min

<sup>3</sup> 10 mm/min

<sup>4</sup> Edgewise