

MRC380D5

Description

MRC380D5, a Post-Consumer Recycled ABS product for injection molding, contains 50% PCR resin and is designed to carry out black 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, High Impact Strength

Application

Electrical/Electronic Products, Miscellaneous Goods

Properties	Condition	Method	Unit	MRC380D5
Physical				
Specific Gravity	23°C	ASTM D792		1.04 ~ 1.08
Mold Shrinkage	23°C, 3.2mm	ASTM D955	%	0.4 ~ 0.7
Melt Flow Index	220°C, 10kg	ASTM D1238	g/10min	40
Mechanical				
Tensile Strength at Yield	23°C, 50mm/min, 3.2mm	ASTM D638	MPa	41
Tensile Elongation at Break	23°C, 50mm/min, 3.2mm	ASTM D638	%, (Min)	10 ~
Flexural Strength	23°C, 15mm/min, 3.2mm	ASTM D790	MPa	65
Flexural Modulus	23°C, 15mm/min, 3.2mm	ASTM D790	MPa	2150
Izod Impact Strength	Notched, 3.2mm, 23°C	ASTM D256	J/m	280
Izod Impact Strength	Notched, 6.4mm, 23°C	ASTM D256	J/m	230
Rockwell Hardness	R-Scale	ASTM D785		100
Thermal				
Heat Deflection Temperature	Edgewise, 1.82MPa, 6.4mm, Unannealed	ASTM D648	°C	85
Flammability	1.1mm	UL 94		HB

Note

Typical values can be used only for the purpose of selecting material, and there can be variation within normal tolerances for various colors.

Values given should not be interpreted as specification and not be used for designing part or tool.

All properties, except melt flow index are measured by injection molded specimens after 48 hours storage at 23°C, 50% relative humidity.

MRC380D5

Description

MRC380D5, a Post-Consumer Recycled ABS product for injection molding, contains 50% PCR resin and is designed to carry out black 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, High Impact Strength

Application

Electrical/Electronic Products, Miscellaneous Goods

Processing Guide (Injection Molding)

Processing Parameters	Unit	Value
Drying Temperature	°C	70 ~ 80
Drying Time	hrs	3 ~ 4
Injection Temperature	°C	190 ~ 220
Mold Temperature	°C	40 ~ 80
Screw Speed	rpm	30 ~ 60

Note

Injection Temperature & Screw Speed are only mentioned as general guidelines.

These may not apply or need adjustment in specific situations such as low shot sizes, thin wall molding and gas-assist molding.

Issued Date : 2025-11-19

The information contained herein, including, but not limited to, data, statements and typical values, are given in good faith. LG Chem makes no warranty or guarantee, expressed or implied, (i) that the result described herein will be obtained under end - use conditions, or (ii) as to the effectiveness or safety of any design incorporating LG Chem materials, products, recommendations or advice. Further, any information contained herein shall not be construed as a part of legally binding offer. Especially, the typical values should be regarded as reference values only and not as binding minimum values. Each user bear full responsibility for making its own determination as to the suitability of LG Chem's materials, products, recommendations, or advice for its own particular use. Each user must identify and perform all tests and analyses necessary to assure that its finished parts incorporating LG Chem material or products will be safe and suitable for use under end - use conditions. The data contained herein can be changed without notice as a result of the quality improvement of the products.