

# MRC380D3

## Description

MRC380D3, a Post-Consumer Recycled ABS product for injection molding, contains 30% 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 30%), High Flow

## Application

Electrical/Electronic Products, Miscellaneous Goods

Properties	Condition	Method	Unit	MRC380D3
<b>Physical</b>				
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
<b>Mechanical</b>				
Tensile Strength at Yield	23°C, 50mm/min, 3.2mm	ASTM D638	MPa	42
Tensile Elongation at Break	23°C, 50mm/min, 3.2mm	ASTM D638	%, (Min)	10 ~
Flexural Strength	23°C, 10mm/min, 6.4mm	ASTM D790	MPa	68
Flexural Modulus	23°C, 10mm/min, 6.4mm	ASTM D790	MPa	2300
Izod Impact Strength	Notched, 3.2mm, 23°C	ASTM D256	J/m	270
Izod Impact Strength	Notched, 6.4mm, 23°C	ASTM D256	J/m	220
Rockwell Hardness	R-Scale	ASTM D785		102
<b>Thermal</b>				
Heat Deflection Temperature	Edgewise, 1.82MPa, 6.4mm, Unannealed	ASTM D648	°C	85
Flammability	1.5mm	UL 94		HB
Flammability	3.0mm	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.

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## 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.