

# TR557

## Injection Molding

### Description

- Transparency, High Impact

### Applications

- Electric & Electronic Products

Properties	Method	Unit	TR557
<b>Physical</b>			
Specific Gravity , 23°C	ASTM D792		1.09
Mold Shrinkage , 23°C, 3.2mm , 23°C	ASTM D955	%	0.4 ~ 0.7
Melt Flow Rate , 220°C, 10kg	ASTM D1238	g/10min	21
<b>Mechanical</b>			
Tensile Strength at Yield , 23°C, 50mm/min, 3.2mm	ASTM D638	MPa	48
Tensile Elongation at Yield , 23°C, 50mm/min, 3.2mm	ASTM D638	%, (Min)	5
Tensile Elongation at Break , 23°C, 50mm/min, 3.2mm	ASTM D638	%, (Min)	15
Tensile Modulus , 23°C, 50mm/min, 3.2mm	ASTM D638	MPa	2050
Flexural Strength , 23°C, 15mm/min, 3.2mm	ASTM D790	MPa	71
Flexural Modulus , 23°C, 15mm/min, 3.2mm	ASTM D790	MPa	2250
Izod Impact Strength , Notched, 3.2mm, 23°C	ASTM D256	J/m	165
Izod Impact Strength , Notched, 3.2mm, -30°C	ASTM D256	J/m	55
Izod Impact Strength , Notched, 6.4mm, 23°C	ASTM D256	J/m	165
Izod Impact Strength , Notched, 6.4mm, -30°C	ASTM D256	J/m	55
Rockwell Hardness , R-Scale	ASTM D785		107
<b>Thermal</b>			
HDT , Edgewise, 1.82MPa, 6.4mm, Unannealed	ASTM D648	°C	81
VICAT , 50N, 50°C/h	ASTM D1525	°C	89
RTI Electrical	UL 746B	°C	50
RTI Mechanical with Impact	UL 746B	°C	50
RTI Mechanical without Impact	UL 746B	°C	50
Flammability, 1.5mm	UL 94		HB
Flammability, 3.0mm	UL 94		HB
<b>Optical</b>			
Haze	ASTM D1003	%	2
Luminous Transmittance , 3.2mm	ASTM D1003	%	90

### 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 rate are measured by injection molded specimens after 48 hours storage at 23°C, 50% relative humidity.

Updated Date : 16-Nov-17 Issued Date : 20-Nov-20

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.

# TR557

Injection Molding

## Description

- Transparency, High Impact

## Applications

- Electric & Electronic Products

## Processing Guide (Injection Molding)

Processing Parameters	Unit	Value
Drying Temperature	°C	80 ~ 90
Drying Time	hrs	2 ~ 4
Moisture Content	%	0.1 ~
Melt Temperature	°C	190 ~ 220
Nozzle Temperature	°C	200 ~ 250
Mold Temperature	°C	40 ~ 80
Back Pressure, Hydraulic Type	kg/cm <sup>2</sup>	30 ~ 60
Screw Speed	rpm	30 ~ 60

## Note

Back Pressure & Measuring 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.