

WeConnectScience



ER461

Description

ER461 is a medium heat ABS with well-balanced properties, targeted for injection molding

Key Features

Standard Purpose, Medium Heat Resistance, Non Painting

Application

Bumper, Exterior ETC, Outside Mirror

Properties	Condition	Method	Unit	ER461
Physical				
Specific Gravity	23°C	ASTM D792		1.05
Mold Shrinkage	23°C, 3.2mm	ASTM D955	%	0.4 ~ 0.7
Melt Flow Index	220°C, 10kg	ASTM D1238	g/10min	14
Mechanical				
Tensile Strength at Yield	23°C, 50mm/min, 3.2mm	ASTM D638	MPa	49
Tensile Elongation at Break	23°C, 50mm/min, 3.2mm	ASTM D638	%, (Min)	20
Flexural Strength	23°C, 15mm/min, 3.2mm	ASTM D790	MPa	78
Flexural Modulus	23°C, 15mm/min, 3.2mm	ASTM D790	MPa	2550
Izod Impact Strength	Notched, 3.2mm, 23°C	ASTM D256	J/m	290
Izod Impact Strength	Notched, 3.2mm, -30°C	ASTM D256	J/m	100
Izod Impact Strength	Notched, 6.4mm, 23°C	ASTM D256	J/m	270
Izod Impact Strength	Notched, 6.4mm, -30°C	ASTM D256	J/m	100
Rockwell Hardness	R-Scale	ASTM D785		110
Thermal				
Heat Deflection Temperature	Edgewise, 1.82MPa, 6.4mm, Unannealed	ASTM D648	°C	93
Heat Deflection Temperature	Edgewise, 0.46MPa, 6.4mm, Unannealed	ASTM D648	°C	100
Heat Deflection Temperature	Edgewise, 1.82MPa, 6.4mm, Annealed	ASTM D648	°C	98
Heat Deflection Temperature	Edgewise, 0.46MPa, 6.4mm, Annealed	ASTM D648	°C	103
Vicat Softening Temperature	50N, 50°C/h	ASTM D1525	°C	100
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.

Updated Date: 2021-05-07 Issued Date : 2023-03-14

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.

WeConnectScience



ER461

Description

ER461 is a medium heat ABS with well-balanced properties, targeted for injection molding

Key Features

Standard Purpose, Medium Heat Resistance, Non Painting

Application

Bumper, Exterior ETC, Outside Mirror

Processing Guide (Injection Molding)

Processing Parameters	Unit	Value
Drying Temperature	°C	80 ~ 90
Drying Time	hrs	3 ~ 4
Injection Temperature	°C	220 ~ 260
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.

Updated Date: 2021-05-07 Issued Date : 2023-03-14

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.