

ABS ER451

ABS

LG Chem

Processing/Physical Characteristics	Value	Unit	Test Standard
ASTM Data			
Melt Flow Index, MFI	15	g/10min	ASTM D 1238
Temperature	220	°C	-
Load	10	kg	-
Mold Shrinkage, MD	0.0055	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ASTM Data			
Tensile Strength at Yield	47.1	MPa	ASTM D 638
Elongation at Break	25	%	ASTM D 638
Flexural Modulus	2600	MPa	ASTM D 790
Flexural Strength	78.5	MPa	ASTM D 790
Rockwell Hardness	R 108	-	ASTM D 785
Izod Impact notched, 1/8 in	283	J/m	ASTM D 256
Izod Impact notched, 1/4 in	264	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	113	J/m	ASTM D 256
Temperature	-30	°C	-

Thermal properties	Value	Unit	Test Standard
ASTM Data			
UL 94 Flame rating	HB	-	UL 94
DTUL @ 66 psi	99	°C	ASTM D 648
DTUL @ 264 psi	91	°C	ASTM D 648
Vicat Temperature	99	°C	ASTM D 1525

Electrical properties	Value	Unit	Test Standard
ISO Data			
Comparative tracking index	600	-	IEC 60112
ASTM Data			
Dielectric Strength, Short Time	30	kV/mm	ASTM D 149
Volume Resistivity	1400	Ohm*cm	ASTM D 257

Other properties	Value	Unit	Test Standard
Density	1050	kg/m ³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80 - 90	°C	-
Pre-drying - Time	3 - 4	h	-
Processing humidity	≤0.01	%	-
Melt temperature	220 - 240	°C	-
Mold temperature	40 - 60	°C	-
Zone 1	180 - 210	°C	-
Zone 2	210 - 230	°C	-
Zone 3	230 - 240	°C	-
Nozzle temperature	230 - 240	°C	-
Screw speed	50 - 100	rpm	-
Back pressure	30 - 60	MPa	-

Characteristics**Processing**

Injection Molding

Applications

Automotive

Special Characteristics

Heat stabilized or stable to heat

Regional Availability

North America, Europe, Asia Pacific, South and Central America