ABS XR401B

ABS LG Chem

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt flow index, MFI	**11**	g/10min	ISO 1133
Temperature	**220**	°C	-
Load	**10**	kg	-
Molding shrinkage, parallel	**0.6**	%	ISO 294-4, 2577
ASTM Data			
Melt Flow Index, MFI	**14**	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
ISO Data			
Tensile Modulus	**2350**	MPa	ISO 527
Yield stress	**50**	MPa	ISO 527
Flexural modulus, 23°C	**2450**	MPa	ISO 178
Flexural strength	**79**	MPa	ISO 178
Charpy notched impact strength, +23°C	**14**	kJ/m²	ISO 179/1eA
Charpy notched impact strength, -30°C	**7**	kJ/m²	ISO 179/1eA
Izod notched impact strength, +23°C	**15**	kJ/m²	ISO 180/1A
Izod notched impact strength	**7**	kJ/m²	ISO 180/1A
Temperature	**-30**	°C	-
Rockwell hardness	**R 113**	-	ISO 2039-2
ASTM Data			
Tensile Strength at Yield	**49**	MPa	ASTM D 638
Elongation at Break	**20**	%	ASTM D 638
Flexural Modulus	**2551**	MPa	ASTM D 790
Flexural Strength	**78.5**	MPa	ASTM D 790
Rockwell Hardness	**R 110**	-	ASTM D 785
Izod Impact notched, 1/8 in	**207**	J/m	ASTM D 256
Izod Impact notched, 1/4 in	**189**	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	**84.8**	J/m	ASTM D 256
Temperature	**-30**	°C	-

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	**90**	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	**97**	°C	ISO 75-1/-2
Vicat softening temperature, B	**107**	°C	ISO 306
ASTM Data			
UL 94 Flame rating	**HB**	-	UL 94
DTUL @ 66 psi	**101**	°C	ASTM D 648
DTUL @ 264 psi	**95**	°C	ASTM D 648
Vicat Temperature	**102**	°C	ASTM D 1525

Electrical properties	Value	Unit	Test Standard
ISO Data			
Comparative tracking index	**600**	-	IEC 60112
ASTM Data			
Dielectric Strength, Short Time	**33**	kV/mm	ASTM D 149
Volume Resistivity	**1500**	Ohm*cm	ASTM D 257

Other properties	Value	Unit	Test Standard
Density	**1050**	kg/m³	ISO 1183
Density	**1050**	kg/m³	ASTM D 792

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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