Makrolon® XT5010

Covestro - Polycarbonates - *Polycarbonate*

General Information

Product Description			
MVR (300°C/1.2 kg) 34 cm³/10 min; easy processing; low viscosity; easy release; Vicat softening temperature 50 N, 50°C/h = 110°C; injection molding - melt temperature 240 - 280°C; available in transparent colors only; LCD tv frame			
General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Good Mold Release	• Good Processability	• Low Viscosity
RoHS Compliance	• RoHS Compliant		
Appearance	• Clear/Transparent	• Colors Available	
Processing Method	• Injection Molding		

Properties [1]

Physical	**Nominal Value**	**Unit**	**Test Method**
Density (73°F)	1.21	g/cm³	ISO 1183
Melt Volume-Flow Rate (MVR) (300°C/1.2 kg)	34	cm³/10min	ISO 1133
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus (73°F)	392000	psi	ISO 527-1/1
Tensile Stress (Yield, 73°F)	10900	psi	ISO 527-2/50
Tensile Stress (Break, 73°F)	8700	psi	ISO 527-2/50
Tensile Strain (Yield, 73°F)	5.0	%	ISO 527-2/50
Tensile Strain (Break, 73°F)	90	%	ISO 527-2/50
Nominal Tensile Strain at Break (73°F)	> 50	%	ISO 527-2/50
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F	No Break		
73°F, Complete Break	100	ft·lb/in²	
Thermal	**Nominal Value**	**Unit**	**Test Method**
Vicat Softening Temperature			
--	237	°F	ISO 306/B120
--	234	°F	ISO 306/B50
RTI Elec (0.06 in)	176	°F	UL 746B
RTI Imp (0.06 in)	176	°F	UL 746B
RTI Str (0.06 in)	176	°F	UL 746B
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating (0.03 to 0.12 in)	V-2		UL 94
Glow Wire Flammability Index			IEC 60695-2-12
0.030 in	1760	°F	
0.06 in	1760	°F	
0.12 in	1760	°F	
Glow Wire Ignition Temperature			IEC 60695-2-13
0.030 in	1470	°F	
0.06 in	1520	°F	
0.12 in	1560	°F	