

Makrolon 2607

General purpose grades / Medium viscosity

Global grade; MVR 12 cm³/10 min; General purpose; Medium viscosity; UV stabilized; Easy release; Injection molding; Available in transparent, translucent and opaque colors

ISO Shortname

ISO 7391-PC,MLR,55-18-9

Property	Test Condition	Unit	Standard	Value
Rheological properties				
Melt mass-flow rate	300 °C; 1.2 kg	g/(10 min)	ASTM D 1238	13
Mold shrinkage, flow/cross to flow		in/in	ASTM D 955	0.006-0.008
Mechanical properties (23 °C/50 % r. h.)				
Tensile modulus	1 mm/min	lb/in ²	ASTM D 638	350000
Tensile stress at yield	-	lb/in ²	ASTM D 638	9400
Tensile elongation at yield	-	%	ASTM D 638	6.0
Tensile elongation at break	-	%	ASTM D 638	115
Tensile stress at break	-	lb/in ²	ASTM D 638	9400
Izod notched impact strength	73 °F, 0.125 in	ft·lb/in	ASTM D 256	16
Flexural modulus	-	lb/in ²	ASTM D 790	340000
Flexural stress at 5 % strain	-	lb/in ²	ASTM D 790	12500
Rockwell hardness		M Scale	ASTM D 785	75
Rockwell hardness		R Scale	ASTM D 785	120
Thermal properties				
Deflection temperature under load, Unannealed	264 psi; 0.250 in	°F	ASTM D 648	268
Deflection temperature under load, Unannealed	66 psi; 0.250 in	°F	ASTM D 648	280
Vicat softening temperature	50 N, 50 °C/h	°F	ASTM D 1525	291
Coefficient of linear thermal expansion, flow/cross-flow		in/in/°F	ASTM D 696	3.34E-05
UL94 Flame Class	Thickness tested: 1.5 mm	Class	UL 94	V-2
UL94 Flame Class	Thickness tested: 3.0 mm	Class	UL 94	HB
UL94 Flame Class	Thickness tested: 6.0 mm	Class	UL 94	HB
Oxygen index		%	ASTM D 2863	28
Thermal conductivity		Btu·in/(h·ft ² ·°F)	ASTM C 177	1.39
Specific heat		Btu/(lb·°F)	ASTM D 2766	0.28
Relative temperature index (Tensile impact strength)	Thickness tested: 1.5 mm	°C	UL 746B	115
Relative temperature index (Tensile strength)	Thickness tested: 1.5 mm	°C	UL 746B	125
Relative temperature index (Electric strength)	Thickness tested: 1.5 mm	°C	UL 746B	125
Electrical properties (23 °C/50 % r. h.)				
Dissipation factor, Tinfoil electrodes	60 Hz	-	ASTM D 150	0.0009
Dissipation factor, Tinfoil electrodes	1 MHz	-	ASTM D 150	0.01
Dielectric constant, Tinfoil electrodes	60 Hz	-	ASTM D 150	3.0
Dielectric constant, Tinfoil electrodes	1 MHz	-	ASTM D 150	2.9
Volume resistivity, Tinfoil electrodes		Ohm·m	ASTM D 257	1.0 E+14
Surface resistivity		Ohm	ASTM D 257	1.0 E+16
Dielectric strength	Short time under oil at 73 °F	V/mil	ASTM D 149	810
Other properties (23 °C)				
Water absorption	73 °F; immersion to saturation	%	ASTM D 570	0.3
Water absorption	73 °F; immersion 24 h	%	ASTM D 570	0.12
Density		lb/in ³	ASTM D 792	0.043
Specific volume		in ³ /lb	ASTM D 792	23.1
Specific gravity		-	ASTM D 792	1.2
Material specific properties				
Refractive index		-	ASTM D 542	1.586
Luminous transmittance (clear transparent materials)	0.125 in	%	ASTM D 1003	88
Haze for transparent materials	0.125 in	%	ASTM D 1003	< 0.8



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Test values

Unless specified to the contrary, the values given have been established on standardised test specimens at room temperature. The figures should be regarded as guide values only and not as binding minimum values. Kindly note that, under certain conditions, the properties can be affected to a considerable extent by the design of the mould/die, the processing conditions and the colouring.

Processing note

Under the recommended processing conditions small quantities of decomposition product may be given off during processing. To preclude any risk to the health and well-being of the machine operatives, tolerance limits for the work environment must be ensured by the provision of efficient exhaust ventilation and fresh air at the workplace in accordance with the Safety Data Sheet. In order to prevent the partial decomposition of the polymer and the generation of volatile decomposition products, the prescribed processing temperatures should not be substantially exceeded. Since excessively high temperatures are generally the result of operator error or defects in the heating system, special care and controls are essential in these areas.

Publisher: Business Development Plastics

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