

Makrolon 6265

Flame retardant grades / Low viscosity

Global grade; MVR (300 °C/1.2 kg) 19 cm³/10 min; Flame retardant; UL 94V-0/1.5 mm; Low viscosity; Easy release; Injection molding - Melt temperature 280 - 320 °C; Available in opaque colors only

ISO Shortname

ISO 7391-PC,MFR,(,)-18-9

Property	Test Condition	Unit	Standard	Value
Rheological properties				
Melt mass-flow rate	300 °C; 1.2 kg	g/10 min	ASTM D1238	20
Mechanical properties (23 °C/50 % r. h.)				
Tensile modulus	1 mm/min	lb/in²	ASTM D638	350000
Tensile stress at yield	-	lb/in²	ASTM D638	9400
Tensile elongation at yield	-	%	ASTM D638	6.0
Tensile elongation at break	-	%	ASTM D638	95
Tensile stress at break	-	lb/in²	ASTM D638	8000
Izod notched impact strength	73 °F, 0.125 in	ft-lb/in	ASTM D256	2.0
Flexural modulus	-	lb/in²	ASTM D790	340000
Flexural stress at 5 % strain	-	lb/in²	ASTM D790	12800
Rockwell hardness	-	M Scale	ASTM D785	70
Thermal properties				
Deflection temperature under load, Unannealed	264 psi; 0.250 in	°F	ASTM D648	261
Deflection temperature under load, Unannealed	66 psi; 0.250 in	°F	ASTM D648	271
Vicat softening temperature	50 N, 50 °C/h	°F	ASTM D1525	293
Coefficient of linear thermal expansion, flow/cross-flow	-	in/in/°F	ASTM D696	3.34E-05
UL94 Flame Class	Thickness tested: 1.5 mm	Class	UL 94	V-0
UL94 Flame Class	Thickness tested: 3.0 mm	Class	UL 94	V-0
Oxygen index	-	%	ASTM D2863	37
Thermal conductivity	-	Btu-in/(h·ft²·°F)	ASTM C177	1.39
Specific heat	-	Btu/(lb·°F)	ASTM D2766	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 D150	0.0004
Dissipation factor, Tinfoil electrodes	1 MHz	-	ASTM D150	0.01
Volume resistivity, Tinfoil electrodes	-	Ohm-m	ASTM D257	1.0 E+14
Surface resistivity	-	Ohm	ASTM D257	1.0 E+16
Electrical strength	Short time under oil at 73 °F	V/mil	ASTM D149	810
Other properties (23 °C)				
Water absorption	73 °F; immersion to saturation	%	ASTM D570	0.30
Water absorption	73 °F; immersion 24 h	%	ASTM D570	0.12
Density	-	lb/in³	ASTM D792	0.043
Specific volume	-	in³/lb	ASTM D792	23.1
Specific gravity	-	-	ASTM D792	1.2