

Covestro Makrolon® 1837* Polycarbonate, Impact Grade

Category : Polymer , Thermoplastic , Polycarbonate (PC) , Polycarbonate, Impact Modified

Material Notes:

ISO 7391-PC,MP,(,,)-09-9Global gradeFormerly Makrolon DP1-1837MVR (300 °C/1.2 kg) 11 cm³/10 minImpact modifiedMedium viscosityEasy releaseInjection molding - Melt temperature 280 - 320 °CAvailable in opaque colors only PreprocessingMax. Water content

Order this product through the following link:

http://www.lookpolymers.com/polymer_Covestro-Makrolon-1837-Polycarbonate-Impact-Grade.php

Physical Properties	Metric	English	Comments
Density	1.19 g/cc	0.0430 lb/in ³	ISO 1183
	1.02 g/cc	0.0368 lb/in ³	Melt
	@Temperature 290 °C	@Temperature 554 °F	
Water Absorption	0.40 %	0.40 %	Similar to ISO 62
Moisture Absorption at Equilibrium	0.12 %	0.12 %	Similar to ISO 62
Linear Mold Shrinkage, Flow	0.0070 cm/cm	0.0070 in/in	ISO 294-4,2577
Linear Mold Shrinkage, Transverse	0.0070 cm/cm	0.0070 in/in	ISO 294-4,2577
Melt Flow	11 g/10 min	11 g/10 min	ISO 1133
	@Load 1.20 kg, Temperature 300 °C	@Load 2.65 lb, Temperature 572 °F	

Mechanical Properties	Metric	English	Comments
Tensile Strength, Yield	58.0 MPa	8410 psi	ISO 527-1/-2
Elongation at Break	>= 50 %	>= 50 %	Nominal; ISO 527-1/-2
Elongation at Yield	5.7 %	5.7 %	ISO 527-1/-2
Tensile Modulus	2.20 GPa	319 ksi	ISO 527-1/-2
Charpy Impact Unnotched	NB	NB	ISO 179/1eU
	NB	NB	ISO 179/1eU
	@Temperature -30.0 °C	@Temperature -22.0 °F	
Impact	4900	4900	Puncture - maximum force (N); ISO 6603-2
	5800	5800	Puncture - maximum force (N); ISO 6603-2
	@Temperature -30.0 °C	@Temperature -22.0 °F	
Puncture Energy	50.0 J	36.9 ft-lb	ISO 6603-2

Mechanical Properties	Metric	English	Comments
	@Temperature -30.0 °C	@Temperature -22.0 °F	ISO 6603-2

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	70.0 µm/m-°C	38.9 µin/in-°F	ISO 11359-1/-2
CTE, linear, Transverse to Flow	70.0 µm/m-°C	38.9 µin/in-°F	ISO 11359-1/-2
Specific Heat Capacity	1.70 J/g-°C	0.406 BTU/lb-°F	Melt
Thermal Conductivity	0.173 W/m-K	1.20 BTU-in/hr-ft ² -°F	Melt
Deflection Temperature at 0.46 MPa (66 psi)	134 °C	273 °F	ISO 75-1/-2
Deflection Temperature at 1.8 MPa (264 psi)	122 °C	252 °F	ISO 75-1/-2
Vicat Softening Point	142 °C	288 °F	50°C/h 50N; ISO 306
Flammability, UL94	HB @Thickness 0.800 mm	HB @Thickness 0.0315 in	IEC 60695-11-10
Oxygen Index	30 %	30 %	ISO 4589-1/-2

Electrical Properties	Metric	English	Comments
Volume Resistivity	>= 1.00e+13 ohm-cm	>= 1.00e+13 ohm-cm	IEC 60093
Surface Resistance	>= 1.00e+15 ohm	>= 1.00e+15 ohm	IEC 60093
Dielectric Constant	3.1 @Frequency 1.00e+6 Hz	3.1 @Frequency 1.00e+6 Hz	IEC 60250
	3.2 @Frequency 100 Hz	3.2 @Frequency 100 Hz	IEC 60250
Dielectric Strength	34.0 kV/mm	864 kV/in	IEC 60243-1
Dissipation Factor	0.0012 @Frequency 100 Hz	0.0012 @Frequency 100 Hz	IEC 60250
	0.012 @Frequency 1.00e+6 Hz	0.012 @Frequency 1.00e+6 Hz	IEC 60250
Comparative Tracking Index	225 V	225 V	IEC 60112

Processing Properties	Metric	English	Comments
Melt Temperature	290 °C	554 °F	Injection Molding; ISO 294
	280 - 320 °C	536 - 608 °F	
Mold Temperature	80.0 °C	176 °F	Injection Molding; ISO 10724
	80.0 - 120 °C	176 - 248 °F	
Ejection Temperature	130 °C	266 °F	
Injection Velocity	200 mm/sec	7.87 in/sec	ISO 294

Descriptive Properties	Value	Comments
Availability	Asia Pacific	
	Europe	
	Near East/Africa	
	North America	
	South and Central America	
Eff. thermal diffusivity (m ² /s)	1E-07	
Feature	Release agent	
Form	Pellets	
Process	Injection Molding	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China