

## Covestro Makrolon® 6717 Polycarbonate, Flame Retardant Grade

Category : Polymer , Thermoplastic , Polycarbonate (PC) , Polycarbonate, Extruded

### Material Notes:

ISO 7391-PC,MFLR,(,,)-05-9Global gradeFormerly Makrolon DP1-1853MVR (300 °C/1.2 kg) 3.0 cm<sup>3</sup>/10 minFlame retardantUL 94V-0/2.0 mmHigh viscosityBranchedUV stabilizedEasy releaseInjection molding - Melt temperature 280 - 320 °CExtrusionAvailable in transparent and translucent colorsPreprocessingMax. Water content

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Covestro-Makrolon-6717-Polycarbonate-Flame-Retardant-Grade.php](http://www.lookpolymers.com/polymer_Covestro-Makrolon-6717-Polycarbonate-Flame-Retardant-Grade.php)

Physical Properties	Metric	English	Comments
Density	1.20 g/cc	0.0434 lb/in <sup>3</sup>	ISO 1183
	1.02 g/cc @Temperature 310 °C	0.0368 lb/in <sup>3</sup> @Temperature 590 °F	Melt
Water Absorption	0.30 %	0.30 %	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	0.0080 cm/cm	0.0080 in/in	ISO 294-4,2577
Melt Flow	3.1 g/10 min	3.1 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	68.0 MPa	9860 psi	ISO 527-1/-2
Elongation at Break	>= 50 %	>= 50 %	Nominal; ISO 527-1/-2
Elongation at Yield	6.4 %	6.4 %	ISO 527-1/-2
Tensile Modulus	2.40 GPa	348 ksi	ISO 527-1/-2
Charpy Impact Unnotched	NB	NB	ISO 179/1eU
	NB @Temperature -30.0 °C	NB @Temperature -22.0 °F	ISO 179/1eU
Impact	5500	5500	Puncture - maximum force (N); ISO 6603-2
	6400 @Temperature -30.0 °C	6400 @Temperature -22.0 °F	

Mechanical Properties	Metric	English	Comments
	65.0 J	47.9 ft-lb	ISO 6603-2
	@Temperature -30.0 °C	@Temperature -22.0 °F	

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	65.0 µm/m-°C	36.1 µin/in-°F	ISO 11359-1/-2
CTE, linear, Transverse to Flow	65.0 µm/m-°C	36.1 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 <sup>2</sup> -°F	Melt
Deflection Temperature at 0.46 MPa (66 psi)	138 °C	280 °F	ISO 75-1/-2
Deflection Temperature at 1.8 MPa (264 psi)	127 °C	261 °F	ISO 75-1/-2
Vicat Softening Point	146 °C	295 °F	50°C/h 50N; ISO 306
Flammability, UL94	V-0	V-0	IEC 60695-11-10
	@Thickness 2.00 mm	@Thickness 0.0787 in	
Oxygen Index	43 %	43 %	ISO 4589-1/-2

Optical Properties	Metric	English	Comments
Transmission, Visible	86 %	86 %	ISO 13468-1, -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	3.0	3.0	IEC 60250
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	
	3.1	3.1	IEC 60250
	@Frequency 100 Hz	@Frequency 100 Hz	
Dielectric Strength	34.0 kV/mm	864 kV/in	IEC 60243-1
Dissipation Factor	0.0010	0.0010	IEC 60250
	@Frequency 100 Hz	@Frequency 100 Hz	
	0.0090	0.0090	

Electrical Properties	Metric @Frequency 1.00e+6 Hz	English @Frequency 1.00e+6 Hz	Comments IEC 60250
Comparative Tracking Index	225 V	225 V	IEC 60112

Processing Properties	Metric	English	Comments
Melt Temperature	280 - 320 °C	536 - 608 °F	
	310 °C	590 °F	Injection Molding; ISO 294
Mold Temperature	90.0 °C	194 °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	
	India	
	Near East/Africa	
	North America	
	South and Central America	
Eff. thermal diffusivity (m <sup>2</sup> /s)	1E-07	
Feature	Light stabilised or stable to light	
	Release agent	
	U.V. stabilised or stable to weather	
Form	Pellets	
Process	Injection Molding	
	Other Extrusion	

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

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