

## Covestro Makrolon® 2558 Polycarbonate

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

### Material Notes:

ISO 7391-PC,MR,(,)-18-9MVR (300 °C/1.2 kg) 14.5 cm<sup>3</sup>/10 min Medical device suitable for ETO and steam sterilization at 121 °C Complies with the requirements of FDA-modified ISO 10993-1 and USP Class VI Medium viscosity Easy release Good hydrolysis resistance Injection molding - Melt temperature 280 - 320 °C Available in transparent and opaque colors Preprocessing Max. Water content

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Covestro-Makrolon-2558-Polycarbonate.php](http://www.lookpolymers.com/polymer_Covestro-Makrolon-2558-Polycarbonate.php)

Physical Properties	Metric	English	Comments
Density	1.20 g/cc	0.0434 lb/in <sup>3</sup>	ISO 1183
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	0.0070 cm/cm	0.0070 in/in	ISO 294-4,2577
Melt Flow	17 g/10 min @Load 1.20 kg, Temperature 300 °C	17 g/10 min @Load 2.65 lb, Temperature 572 °F	estimated from MVR using room temperature density; ISO 1133

Mechanical Properties	Metric	English	Comments
Tensile Strength, Yield	66.0 MPa	9570 psi	ISO 527-1/-2
Elongation at Break	>= 50 %	>= 50 %	Nominal; ISO 527-1/-2
Elongation at Yield	6.1 %	6.1 %	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	5400	5400	Puncture - maximum force (N); ISO 6603-2
	6300 @Temperature -30.0 °C	6300 @Temperature -22.0 °F	Puncture - maximum force (N); ISO 6603-2
Puncture Energy	60.0 J	44.3 ft-lb	ISO 6603-2
	65.0 J	47.9 ft-lb	

Mechanical Properties	Metric @ Temperature -30.0 °C	English @ Temperature -22.0 °F	ISO 6603-2 Comments
Tensile Creep Modulus, 1 hour	2200 MPa	319000 psi	ISO 899-1
Tensile Creep Modulus, 1000 hours	1900 MPa	276000 psi	ISO 899-1

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
Deflection Temperature at 0.46 MPa (66 psi)	136 °C	277 °F	ISO 75-1/-2
Deflection Temperature at 1.8 MPa (264 psi)	124 °C	255 °F	ISO 75-1/-2
Vicat Softening Point	144 °C	291 °F	50°C/h 50N; ISO 306
Glass Transition Temp, Tg	145 °C	293 °F	ISO 11357-1/-2
Flammability, UL94	HB	HB	IEC 60695-11-10
	@Thickness 2.50 mm	@Thickness 0.0984 in	
	V-2	V-2	IEC 60695-11-10
	@Thickness 1.50 mm	@Thickness 0.0591 in	
Oxygen Index	27 %	27 %	ISO 4589-1/-2

Optical Properties	Metric	English	Comments
Transmission, Visible	89 %	89 %	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	
Dielectric Strength	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	0.00050	0.00050	IEC 60250

Electrical Properties	@Frequency 100 Hz Metric	@Frequency 100 Hz English	Comments
	0.0090	0.0090	
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	IEC 60250
Comparative Tracking Index	250 V	250 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	
Injection Velocity	200 mm/sec	7.87 in/sec	ISO 294

Descriptive Properties	Value	Comments
Availability	Europe	
	Near East/Africa	
	North America	
	South and Central America	
Feature	Release agent	
Form	Pellets	
Process	Injection Molding	

## 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