

## Covestro Makrolon® 6465 Polycarbonate, Injection Grade

Category : Polymer , Thermoplastic , Polycarbonate (PC) , Polycarbonate, Unreinforced, Flame Retardant

### Material Notes:

Medium viscosity, flame retardant injection molding with easy mold burning behavior. Information provided by Bayer. As of 1 September 2015, Bayer Material Science was separated from Bayer AG and officially adopted its new name – Covestro.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Covestro-Makrolon-6465-Polycarbonate-Injection-Grade.php](http://www.lookpolymers.com/polymer_Covestro-Makrolon-6465-Polycarbonate-Injection-Grade.php)

Physical Properties	Metric	English	Comments
Density	1.20 g/cc	0.0434 lb/in <sup>3</sup>	
Water Absorption	0.35 %	0.35 %	Saturation in water
Moisture Absorption at Equilibrium	0.15 %	0.15 %	Equilibrium at 50% RH
Water Absorption at Saturation	0.35 %	0.35 %	
Melt Flow	9.5 g/10 min @Load 1.20 kg, Temperature 300 °C	9.5 g/10 min @Load 2.65 lb, Temperature 572 °F	

Mechanical Properties	Metric	English	Comments
Tensile Strength, Yield	63.0 MPa	9140 psi	
Elongation at Break	>= 50 %	>= 50 %	Nominal
Elongation at Yield	6.0 %	6.0 %	
Tensile Modulus	2.40 GPa	348 ksi	
Charpy Impact Unnotched	NB	NB	
Tensile Creep Modulus, 1 hour	2200 MPa	319000 psi	
Tensile Creep Modulus, 1000 hours	1900 MPa	276000 psi	

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	70.0 µm/m-°C	38.9 µin/in-°F	
	@Temperature 20.0 °C	@Temperature 68.0 °F	
CTE, linear, Transverse to Flow	70.0 µm/m-°C	38.9 µin/in-°F	
	@Temperature 20.0 °C	@Temperature 68.0 °F	
Deflection Temperature at 0.46 MPa (66 psi)	136 °C	277 °F	

Thermal Properties	Metric	English	Comments
Vicat Softening Point	144 °C	291 °F	
Glass Transition Temp, Tg	148 °C	298 °F	
UL RTI, Electrical	125 °C @Thickness 1.10 mm	257 °F @Thickness 0.0433 in	
UL RTI, Mechanical with Impact	110 °C @Thickness 1.10 mm	230 °F @Thickness 0.0433 in	
UL RTI, Mechanical without Impact	125 °C @Thickness 1.10 mm	257 °F @Thickness 0.0433 in	
Flammability, UL94	V-0 @Thickness 1.20 mm	V-0 @Thickness 0.0472 in	
	V-0 @Thickness 1.60 mm	V-0 @Thickness 0.0630 in	
Oxygen Index	35 %	35 %	

Electrical Properties	Metric	English	Comments
Electrical Resistivity	>= 1.00e+15 ohm-cm	>= 1.00e+15 ohm-cm	
Surface Resistance	1.00e+15 ohm	1.00e+15 ohm	
Dielectric Constant	3.0 @Frequency 100 Hz	3.0 @Frequency 100 Hz	
	3.0 @Frequency 1e+6 Hz	3.0 @Frequency 1e+6 Hz	
Dielectric Strength	30.0 kV/mm	762 kV/in	
Dissipation Factor	0.0010 @Frequency 100 Hz	0.0010 @Frequency 100 Hz	
	0.0090 @Frequency 1e+6 Hz	0.0090 @Frequency 1e+6 Hz	
Arc Resistance	60 - 120 sec @Thickness 6.00 mm	60 - 120 sec @Thickness 0.236 in	UL Rating PLC 6 (60-120 sec)
Comparative Tracking Index	275 V	275 V	

Electrical Properties	30 - 60 sec Metric	30 - 60 sec English	Comments
	@Thickness 1.10 mm	@Thickness 0.0433 in	UL Rating PLC 2 (30-60 sec)
High Amp Arc Ignition, HAI	60 - 120 arcs @Thickness 1.10 mm	60 - 120 arcs @Thickness 0.0433 in	UL Rating PLC 1 (60-120 arcs)
High Voltage Arc-Tracking Rate, HVTR	<= 10.0 mm/min @Thickness 6.00 mm	<= 0.394 in/min @Thickness 0.236 in	UL Rating PLC 0 (<10 mm/min.)

## 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