

## Covestro Makrolon® DP 1-1456 Polycarbonate, Impact Grade

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

### Material Notes:

Impact modified injection molding grade, extremely easy flow and easy mold release, for thin walled applications with long flow lengths. Information provided by Bayer. As of 1 September 2015, Bayer MaterialScience 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-DP-1-1456-Polycarbonate-Impact-Grade.php](http://www.lookpolymers.com/polymer_Covestro-Makrolon-DP-1-1456-Polycarbonate-Impact-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 %	
Linear Mold Shrinkage	0.0050 - 0.0070 cm/cm	0.0050 - 0.0070 in/in	ASTM D955
Melt Flow	27 g/10 min @Load 1.20 kg, Temperature 300 °C	27 g/10 min @Load 2.65 lb, Temperature 572 °F	

Mechanical Properties	Metric	English	Comments
Tensile Strength, Ultimate	55.0 MPa	7980 psi	ASTM D638
Tensile Strength, Yield	55.0 MPa	7980 psi	
Elongation at Break	>= 50 %	>= 50 %	Nominal
Elongation at Yield	5.5 %	5.5 %	
Tensile Modulus	2.00 GPa	290 ksi	
Flexural Yield Strength	83.0 MPa	12000 psi	at 5% strain; ASTM D790
Flexural Modulus	2.10 GPa	305 ksi	ASTM D790
Izod Impact, Notched	5.87 J/cm @Thickness 3.20 mm	11.0 ft-lb/in @Thickness 0.126 in	ASTM D256
Charpy Impact Unnotched	NB	NB	
Impact Test	65.0 J @Thickness 3.20 mm	47.9 ft-lb @Thickness 0.126 in	Instrumented total energy; 3.2 mm thick; 0.5 in. dart; 3 in. clamp; 15 mph; ASTM D3763

Thermal Properties	Metric	English	Comments
Deflection Temperature at 0.46 MPa (66 psi)	135 °C	275 °F	
Deflection Temperature at 1.8 MPa (264 psi)	123 °C	253 °F	
Vicat Softening Point	144 °C	291 °F	
UL RTI, Electrical	80.0 °C @Thickness 1.50 mm	176 °F @Thickness 0.0591 in	
UL RTI, Mechanical with Impact	80.0 °C @Thickness 1.50 mm	176 °F @Thickness 0.0591 in	
UL RTI, Mechanical without Impact	80.0 °C @Thickness 1.50 mm	176 °F @Thickness 0.0591 in	
Flammability, UL94	HB @Thickness 1.60 mm	HB @Thickness 0.0630 in	(Black)

Processing Properties	Metric	English	Comments
Melt Temperature	293 - 332 °C	559 - 630 °F	

## Contact Songhan Plastic Technology Co.,Ltd.

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