

Makrolon® RW6265 X

Polycarbonate

Covestro - Polycarbonates

PROSPECTOR®

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Technical Data

Product Description

MVR (300°C/1.2 kg) 19 cm³/10 min; low viscosity; easy release; flame retardant; variable content of filler for high reflectance application; injection molding

General

Material Status	• Commercial: Active
Literature ¹	• Technical Datasheet (English)
UL Yellow Card ²	• E41613-101325084
Search for UL Yellow Card	• Covestro - Polycarbonates • Makrolon®
Availability	• Africa & Middle East • Asia Pacific • Europe • Latin America • North America
Additive	• Flame Retardant
Features	• Flame Retardant • Good Mold Release • Low Viscosity
RoHS Compliance	• RoHS Compliant
Processing Method	• Injection Molding

Physical	Nominal Value Unit	Test Method
Density (23°C)	1.24 to 1.34 g/cm³	ISO 1183
Melt Volume-Flow Rate (MVR) (300°C/1.2 kg)	19 cm³/10min	ISO 1133
Mechanical	Nominal Value Unit	Test Method
Tensile Modulus (23°C)	2500 to 2700 MPa	ISO 527-1/1
Tensile Stress		ISO 527-2/5
Yield, 23°C	60.0 MPa	
Break, 23°C	50.0 to 60.0 MPa	
Tensile Strain		ISO 527-2/5
Yield, 23°C	5.5 %	
Break, 23°C	80 to 110 %	
Nominal Tensile Strain at Break (23°C)	> 50 %	ISO 527-2/5
Impact	Nominal Value Unit	Test Method
Charpy Unnotched Impact Strength (23°C)	No Break	ISO 179/1eU
Notched Izod Impact Strength		ISO 180/A
23°C, Complete Break	15 kJ/m²	
Multi-Axial Instrumented Impact Energy		ISO 6603-2
23°C	40.0 to 47.0 J	
Multi-Axial Instrumented Impact Peak Force		ISO 6603-2
23°C	4700 to 5000 N	
Thermal	Nominal Value Unit	Test Method
Vicat Softening Temperature	140 to 143 °C	ISO 306/B50
RTI Elec (1.5 mm)	125 °C	UL 746B
RTI Imp (1.5 mm)	115 °C	UL 746B
RTI Str (1.5 mm)	125 °C	UL 746B
Flammability	Nominal Value Unit	Test Method
Flame Rating (1.5 mm, WT)	V-0	UL 94
Optical	Nominal Value Unit	Test Method
Light Reflection (4.00 mm)	96 to 97 %	JIS 8722



Injection	Nominal Value Unit
Drying Temperature - Dry Air Dryer	120 °C
Drying Time - Dry Air Dryer	2.0 to 3.0 hr
Suggested Max Moisture	< 0.020 %
Suggested Shot Size	30 to 70 %
Rear Temperature	250 to 260 °C
Middle Temperature	270 to 280 °C
Front Temperature	280 to 290 °C
Nozzle Temperature	290 to 300 °C
Processing (Melt) Temp	280 to 320 °C
Mold Temperature	80 to 120 °C
Back Pressure	5.00 to 15.0 MPa
Vent Depth	0.025 to 0.075 mm

Injection Notes

Hold Pressure (% of Injection Pressure): 50 - 75%
Standard Melt Temperature: 300°C
Peripheral Screw Speed: 0.05 - 0.2 m/s

Notes

¹ These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

² A UL Yellow Card contains UL-verified flammability and electrical characteristics. UL Prospector continually works to link Yellow Cards to individual plastic materials in Prospector, however this list may not include all of the appropriate links. It is important that you verify the association between these Yellow Cards and the plastic material found in Prospector. For a complete listing of Yellow Cards, visit the UL Yellow Card Search.

³ Typical properties: these are not to be construed as specifications.

