

Makrolon® RW2407

Covestro - Polycarbonates - *Polycarbonate*

General Information

Product Description

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

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	
Additive	• UV Stabilizer		
Features	• Good Mold Release	• Low Viscosity	• UV Stabilized
RoHS Compliance	• RoHS Compliant		
Processing Method	• Injection Molding		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density (73°F)	1.24 to 1.34	g/cm ³	ISO 1183
Melt Volume-Flow Rate (MVR) (300°C/1.2 kg)	19	cm ³ /10min	ISO 1133
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (73°F)	363000 to 392000	psi	ISO 527-1/1
Tensile Stress (Yield, 73°F)	8700	psi	ISO 527-2/5
Tensile Stress (Break, 73°F)	7250 to 8700	psi	ISO 527-2/5
Tensile Strain (Yield, 73°F)	5.5	%	ISO 527-2/5
Tensile Strain (Break, 73°F)	80 to 110	%	ISO 527-2/5
Nominal Tensile Strain at Break (73°F)	> 50	%	ISO 527-2/5
Flexural Modulus ² (73°F)	363000 to 399000	psi	ISO 178
Flexural Stress ²			ISO 178
73°F	13900	psi	
3.5% Strain, 73°F	10900 to 11600	psi	
Flexural Strain at Flexural Strength ³ (73°F)	6.0 to 6.5	%	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Unnotched Impact Strength (73°F)	No Break		ISO 179/1eU
Notched Izod Impact Strength (73°F, Complete Break)	7.1	ft·lb/in ²	ISO 180/A
Multi-Axial Instrumented Impact Energy (73°F)	31.7 to 36.9	ft·lb	ISO 6603-2
Multi-Axial Instrumented Impact Peak Force (73°F)	1080 to 1150	lbf	ISO 6603-2
Thermal	Nominal Value	Unit	Test Method
Vicat Softening Temperature	291	°F	ISO 306/B50
RTI Elec (0.06 in)	257	°F	UL 746B
RTI Imp (0.06 in)	239	°F	UL 746B
RTI Str (0.06 in)	257	°F	UL 746B
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.11 in, WT	HB		
0.12 in, WT	HB		
0.030 in, WT	V-2		
0.06 in, WT	V-2		
Glow Wire Flammability Index			IEC 60695-2-12
0.030 in	1560	°F	
0.12 in	1760	°F	



Optical	Nominal Value	Unit	Test Method
Light Reflection (0.16 in)	96 to 97	%	JIS 8722

Processing Information

Injection	Nominal Value	Unit
Drying Temperature - Dry Air Dryer	248	°F
Drying Time - Dry Air Dryer	2.0 to 3.0	hr
Suggested Max Moisture	< 0.020	%
Suggested Shot Size	30 to 70	%
Rear Temperature	482 to 500	°F
Middle Temperature	518 to 536	°F
Front Temperature	536 to 554	°F
Nozzle Temperature	554 to 572	°F
Processing (Melt) Temp	536 to 608	°F
Mold Temperature	176 to 248	°F
Back Pressure	725 to 2180	psi
Vent Depth	9.8E-4 to 3.0E-3	in

Injection Notes

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

Notes

¹ Typical properties: these are not to be construed as specifications.

² 0.079 in/min

³ 2.0 mm/min

