

Makrolon® RW2405

Covestro - Polycarbonates - Polycarbonate

General Information
Product Description

MVR (300°C/1.2 kg) 19 cm³/10 min; low viscosity; easy release; 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	
Features	• Good Mold Release	• Low Viscosity	
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/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 (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
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/in²	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

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

Notes

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

