Makrolon® Rx2430 RE

PC — Covestro Deutschland AG

Product Texts

- MVR (300 °C/1.2 kg) 19 cm³/10 min
- medical devices
- suitable for sterilization with high-energy radiation
- biocompatible according to many ISO 10993-1 test requirements
- low viscosity
- transparent parts for medical devices

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
[C] Melt volume-flow rate, MVR	**19**	cm³/10min	ISO 1133
Temperature	**300**	°C	-
Load	**1.2**	kg	-
[C] Molding shrinkage, parallel	**0.6**	%	ISO 294-4, 2577
[C] Molding shrinkage, normal	**0.7**	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ISO Data			
[C] Tensile Modulus	**2400**	MPa	ISO 527
[C] Yield stress	**67**	MPa	ISO 527
[C] Yield strain	**6.1**	%	ISO 527
[C] Nominal strain at break	**>50**	%	ISO 527
[C] Charpy impact strength, +23°C	**N**	kJ/m²	ISO 179/1eU
[C] Puncture - maximum force, +23°C	**5300**	N	ISO 6603-2
[C] Puncture - maximum force, -30°C	**6200**	N	ISO 6603-2
[C] Puncture energy, +23°C	**60**	J	ISO 6603-2
[C] Puncture energy, -30°C	**70**	J	ISO 6603-2

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
ISO Data			
[C] Temp. of deflection under load, 1.80 MPa	**122**	°C	ISO 75-1/-2
[C] Temp. of deflection under load, 0.45 MPa	**134**	°C	ISO 75-1/-2
[C] Vicat softening temperature, B	**141**	°C	ISO 306
[C] Coeff. of linear therm. expansion, parallel	**65**	E-6/K	ISO 11359-1/-2
[C] Coeff. of linear therm. expansion, normal	**65**	E-6/K	ISO 11359-1/-2
[C] Burning Behav. at thickness h	**V-2**	class	IEC 60695-11-10
Thickness tested	**0.4**	mm	-

[C]: CAMPUS

Electrical properties	Value	Unit	Test Standard
ISO Data			
[C] Volume resistivity	**>1E13**	Ohm*m	IEC 62631-3-1
[C] Surface resistivity	**>1E15**	Ohm	IEC 62631-3-2

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
[C] Water absorption	**0.3**	%	Sim. to ISO 62
[C] Humidity absorption	**0.12**	%	Sim. to ISO 62
[C] Density	**1200**	kg/m³	ISO 1183

[C]: CAMPUS

Test specimen production	Value	Unit	Test Standard
ISO Data			
[C] Injection Molding, melt temperature	**280**	°C	ISO 294
Injection Molding, mold temperature	**80**	°C	ISO 294
Injection Molding, injection velocity	**200**	mm/s	ISO 294

[C]: CAMPUS

Characteristics

Special Characteristics
Transparent, Sterilizable, Gamma irradiation sterilization

Applications
Medical

Certifications
Contains renewable resources, Biocompatibility ISO 10993, ISCC Plus

Regional Availability
North America, Europe, Asia Pacific, Near East/Africa