Makrolon® AG2477

PC — Covestro Deutschland AG

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

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	**2400**	MPa	ISO 527
Yield stress	**66**	MPa	ISO 527
Yield strain	**6**	%	ISO 527
Nominal strain at break	**>50**	%	ISO 527
Stress at break	**65**	MPa	ISO 527
Strain at break	**120**	%	ISO 527
Flexural modulus, 23°C	**2350**	MPa	ISO 178
Flexural strength	**98**	MPa	ISO 178
Charpy impact strength, +23°C	**N**	kJ/m²	ISO 179/1eU
Charpy impact strength, -30°C	**N**	kJ/m²	ISO 179/1eU
Izod notched impact strength, +23°C	**60**[1]	kJ/m²	ISO 180/1A
Izod notched impact strength	**12**[1]	kJ/m²	ISO 180/1A
Temperature	**-30**	°C	-

1: 3 mm

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	**124**	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	**136**	°C	ISO 75-1/-2
Vicat softening temperature, B	**141**	°C	ISO 306
Coeff. of linear therm. expansion, parallel	**65**	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	**65**	E-6/K	ISO 11359-1/-2

Test specimen production	Value	Unit	Test Standard
ISO Data			
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

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	**120**	°C	-
Pre-drying - Time	**2 - 3**	h	-
Processing humidity	**≤0.02**	%	-
Melt temperature	**280 - 320**	°C	-
Mold temperature	**80 - 120**	°C	-
Zone 1	**250 - 260**	°C	-
Zone 2	**270 - 280**	°C	-
Zone 3	**280 - 290**	°C	-
Nozzle temperature	**290 - 300**	°C	-
Back pressure	**5 - 15**	MPa	-

Characteristics

Processing

Injection Molding

Applications

Automotive

Additives
Release agent

Special Characteristics
U.V. stabilized or stable to weather, Transparent

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