



Makrolon® DS801
PC-QD40

Covestro Deutschland AG

Rheological properties	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	10	cm³/10min	ISO 1133
Temperature	300	°C	-
Load	1.2	kg	-
Molding shrinkage, parallel	0.3	%	ISO 294-4, 2577
Molding shrinkage, normal	0.3	%	ISO 294-4, 2577

Mechanical Properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	4800	MPa	ISO 527
Nominal strain at break	2	%	ISO 527
Stress at Break	60	MPa	ISO 527
Impact Strength (Charpy), +23°C	30	kJ/m²	ISO 179/1eU
Type of failure	C	-	-
Puncture - maximum force, +23°C	400	N	ISO 6603-2
Puncture energy, +23°C	1	J	ISO 6603-2
Flexural Modulus (23°C)	5000	MPa	ISO 178
Flexural strength	110	MPa	ISO 178
Ball Indentation Hardness	175	MPa	ISO 2039-1

Thermal Properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load (1.80 MPa)	129	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	136	°C	ISO 75-1/-2
Vicat softening temperature, 50°C/h 50N	141	°C	ISO 306
Coeff. of Linear Therm. Expansion, parallel	47	E-6/K	ISO 11359-1/-2
Coeff. of Linear Therm. Expansion, normal	46	E-6/K	ISO 11359-1/-2
Oxygen index	35	%	ISO 4589-1/-2
Glow Wire (GWFI, Flammability Index)	875	°C	IEC 60695-2-12
GWFI - thickness tested (1)	1.5	mm	-
Glow Wire (GWFI, Flammability Index)	960	°C	IEC 60695-2-12
GWFI - thickness tested (2)	3	mm	-
Glow Wire Ignition Temperature	875	°C	IEC 60695-2-13
GWIT - thickness tested (1)	1.5	mm	-
Glow Wire Ignition Temperature	875	°C	IEC 60695-2-13
GWIT - thickness tested (2)	3	mm	-

Other Properties	Value	Unit	Test Standard
ISO Data			
Density	1460	kg/m³	ISO 1183

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	120	°C	-
Pre-drying - Time	4	h	-
Melt temperature	300 - 320	°C	-
Mold temperature	90 - 100	°C	-

Characteristics

Processing

Injection Molding