

Product Texts

CYCOLOY CS9610 Polycarbonate/Acrylonitrile Butadiene Styrene (PC/ABS) blend is an injection moldable low smoke, non chlorinated/brominated flame retardant grade. It has good mechanical and impact properties and has a UL94 V0@2.0mm and 5VB@2.0mm flame rating.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	12	cm ³ /10min	ISO 1133
Temperature	260	°C	-
Load	5	kg	-
Density of melt	1080	kg/m ³	-
Thermal conductivity of melt	0.19	W/(m K)	-
Spec. heat capacity of melt	1860	J/(kg K)	-
Ejection temperature	120	°C	-
ASTM Data			
Melt Flow Index, MFI	15	g/10min	ASTM D 1238
Temperature	260	°C	-
Load	5	kg	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	2400	MPa	ISO 527
Yield stress	62	MPa	ISO 527
Yield strain	4.8	%	ISO 527
Stress at break	50	MPa	ISO 527
Strain at break	45	%	ISO 527
Flexural modulus	2500	MPa	ISO 178
Charpy notched impact strength, +23°C, 3mm	45	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C, 3mm	15	kJ/m ²	ISO 179/1eA
Izod notched impact strength, +23°C, 3mm	45	kJ/m ²	ISO 180/1A
Izod notched impact strength, -30°C, 3mm	15	kJ/m ²	ISO 180/1A
ASTM Data			
Tensile Modulus	2600	MPa	ASTM D 638
Tensile Strength at Yield	64	MPa	ASTM D 638
Tensile Strength at Break	62	MPa	ASTM D 638
Elongation at Yield	5	%	ASTM D 638
Elongation at Break	55	%	ASTM D 638
Flexural Modulus	2440	MPa	ASTM D 790
Izod Impact notched, 1/8 in	800	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	106	°C	ISO 75-1/-2
Vicat softening temperature, B	124	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	127	°C	ISO 306
Coeff. of linear therm. expansion, parallel	69	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	74	E-6/K	ISO 11359-1/-2
ASTM Data			
DTUL @ 66 psi	118	°C	ASTM D 648
DTUL @ 264 psi	105	°C	ASTM D 648

Other properties	Value	Unit	Test Standard
Density	1220	kg/m ³	ISO 1183
Density	1200	kg/m ³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	90	°C	-
Pre-drying - Time	4	h	-
Processing humidity	≤0.04	%	-

Melt temperature	270 - 300	°C	-
Mold temperature	60 - 90	°C	-
Feed temperature	60 - 80	°C	-
Zone 1	260 - 300	°C	-
Zone 2	260 - 300	°C	-
Zone 3	265 - 300	°C	-
Screw speed	40 - 70	rpm	-
Back pressure	0.3 - 0.7	MPa	-

Characteristics

Processing

Injection Molding

Additives

Flame retarding agent

Special Characteristics

Flame retardant

Regional Availability

Europe