

CYCOLOY™ FR Resin CX7510 - Americas

(PC+ABS)

Saudi Basic Industries Corporation (SABIC)

Product Texts

CYCOLOY CX7510 Polycarbonate/Acrylonitrile Butadiene Styrene (PC/ABS) blend is an injection moldable, high flow, high heat resistant, non chlorinated/brominated flame retardant grade. It has a UL94 V0@1.5mm and 5VB@1.5mm flame rating. This grade has improved chemical resistance compared to standard PC/ABS blends and is a good candidate for thin wall applications.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	41	cm ³ /10min	ISO 1133
Temperature	260	°C	-
Load	5	kg	-
Density of melt	1050	kg/m ³	-
Thermal conductivity of melt	0.2	W/(m K)	-
Spec. heat capacity of melt	2100	J/(kg K)	-
Ejection temperature	106	°C	-
ASTM Data			
Melt Flow Index, MFI	45	g/10min	ASTM D 1238
Temperature	260	°C	-
Load	5	kg	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	2540	MPa	ISO 527
Yield stress	64	MPa	ISO 527
Yield strain	4.5	%	ISO 527
Stress at break	48	MPa	ISO 527
Strain at break	36	%	ISO 527
Flexural modulus	2620	MPa	ISO 178
Charpy notched impact strength, +23°C	36	kJ/m ²	ISO 179/1eA
ASTM Data			
Tensile Modulus	2580	MPa	ASTM D 638
Tensile Strength at Yield	65	MPa	ASTM D 638
Tensile Strength at Break	49	MPa	ASTM D 638
Elongation at Yield	4	%	ASTM D 638
Elongation at Break	36	%	ASTM D 638
Flexural Modulus	2330	MPa	ASTM D 790
Izod Impact notched, 1/8 in	640	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	137	J/m	ASTM D 256
Temperature	-30	°C	-

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	95	°C	ISO 75-1/-2
Vicat softening temperature, B	115	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	118	°C	ISO 306
Coeff. of linear therm. expansion, parallel	102	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	105	E-6/K	ISO 11359-1/-2
ASTM Data			
Vicat Temperature	113	°C	ASTM D 1525

Other properties	Value	Unit	Test Standard
Water absorption	0.11	%	Sim. to ISO 62
Humidity absorption	0.05	%	Sim. to ISO 62
Density	1180	kg/m ³	ISO 1183
Density	1180	kg/m ³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	90 - 100	°C	-
Pre-drying - Time	2 - 4	h	-
Processing humidity	≤0.04	%	-

Melt temperature	270 - 300	°C	-
Mold temperature	60 - 90	°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

Chemical Resistance

General Chemical Resistance

Regional Availability

North America