

**Product Texts**

CYCOLOY CX2142ME Polycarbonate/Acrylonitrile Butadiene Styrene (PC/ABS) blend is an injection moldable, high flow, non chlorinated/brominated flame retardant grade. It has a UL94 V0@1.2mm and 5VB@2.0mm flame rating. This grade has improved chemical resistance compared to standard PC/ABS blends and is a good candidate for thin wall applications and hospital/medical equipment.

UL Yellow Card Link [E207780-546814](https://www.ulprospector.com/207780-546814)

<b>Processing/Physical Characteristics</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
Melt volume-flow rate, MVR	21	cm <sup>3</sup> /10min	ISO 1133
Temperature	260	°C	-
Load	2.16	kg	-
Density of melt	1070	kg/m <sup>3</sup>	-
Thermal conductivity of melt	0.26	W/(m K)	-
Spec. heat capacity of melt	1920	J/(kg K)	-
Ejection temperature	93	°C	-
<b>ASTM Data</b>			
Melt Flow Index, MFI	22.5	g/10min	ASTM D 1238
Temperature	260	°C	-
Load	2.16	kg	-
<b>Mechanical properties</b>			
<b>ISO Data</b>			
Tensile Modulus	2700	MPa	ISO 527
Yield stress	61	MPa	ISO 527
Yield strain	4	%	ISO 527
Stress at break	51	MPa	ISO 527
Strain at break	50	%	ISO 527
Flexural modulus	2500	MPa	ISO 178
Charpy notched impact strength, +23°C, 3mm	15	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy notched impact strength, -30°C, 3mm	10	kJ/m <sup>2</sup>	ISO 179/1eA
Izod notched impact strength, +23°C, 3mm	15	kJ/m <sup>2</sup>	ISO 180/1A
Izod notched impact strength, -30°C, 3mm	10	kJ/m <sup>2</sup>	ISO 180/1A
<b>ASTM Data</b>			
Tensile Modulus	2900	MPa	ASTM D 638
Tensile Strength at Yield	64	MPa	ASTM D 638
Tensile Strength at Break	54	MPa	ASTM D 638
Elongation at Yield	4	%	ASTM D 638
Elongation at Break	90	%	ASTM D 638
Flexural Modulus	2700	MPa	ASTM D 790
Izod Impact notched, 1/8 in	600	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	120	J/m	ASTM D 256
Temperature	-30	°C	-
<b>Thermal properties</b>			
<b>ISO Data</b>			
Temp. of deflection under load, 1.80 MPa	84	°C	ISO 75-1/-2
Vicat softening temperature, B	102	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	102	°C	ISO 306
Coeff. of linear therm. expansion, parallel	75	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	75	E-6/K	ISO 11359-1/-2
Burning behav. at thickness h	V-0	class	IEC 60695-11-10
Thickness tested	1.2	mm	-
Burning behav. 5V at thickness h	5VB	class	IEC 60695-11-20
Thickness tested	2.0	mm	-
Thermal Conductivity	0.2	W/(m K)	DIN 52616
<b>ASTM Data</b>			
DTUL @ 66 psi	94	°C	ASTM D 648
DTUL @ 264 psi	84	°C	ASTM D 648

**CYCOLOY™ FR Resin CX2142ME - Asia**  
(PC+ABS)

Saudi Basic Industries Corporation (SABIC)

Vicat Temperature **102** °C ASTM D 1525

Other properties	Value	Unit	Test Standard
Water absorption	<b>0.2</b>	%	Sim. to ISO 62
Humidity absorption	<b>0.1</b>	%	Sim. to ISO 62
Density	<b>1190</b>	kg/m <sup>3</sup>	ISO 1183
Density	<b>1190</b>	kg/m <sup>3</sup>	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	<b>80 - 90</b>	°C	-
Pre-drying - Time	<b>3 - 4</b>	h	-
Processing humidity	<b>≤0.04</b>	%	-
Melt temperature	<b>245 - 275</b>	°C	-
Mold temperature	<b>60 - 80</b>	°C	-
Zone 1	<b>220 - 255</b>	°C	-
Zone 2	<b>220 - 265</b>	°C	-
Zone 3	<b>245 - 275</b>	°C	-
Screw speed	<b>40 - 70</b>	rpm	-
Back pressure	<b>0.3 - 0.7</b>	MPa	-

**Characteristics**

**Processing**

Injection Molding

**Additives**

Flame retarding agent

**Special Characteristics**

Flame retardant

**Chemical Resistance**

General Chemical Resistance

**Regional Availability**

Asia Pacific