

**Product Texts**

CYCOLOY RCY6713 resin is based on high heat Polycarbonate (PC) with non-brominated and non-chlorinated flame retardant. It contains 30% post consumer recycle content with a UL-94 V0 rating @ 1.5 mm. This grade is suitable for thin wall applications that require high flow and high stiffness performance.

UL Yellow Card Link: [E207780-100960579](https://www.ul.com/yellow-card/E207780-100960579)

Processing/Physical Characteristics	Value	Unit	Test Standard
<b>ISO Data</b>			
Melt flow index, MFI	16	g/10min	ISO 1133
Temperature	260	°C	-
Load	5	kg	-
<b>ASTM Data</b>			
Melt Flow Index, MFI	6.3	g/10min	ASTM D 1238
Temperature	260	°C	-
Load	2.16	kg	-
Mold Shrinkage, MD	0.005	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Tensile Modulus	2300	MPa	ISO 527
Yield stress	58	MPa	ISO 527
Yield strain	5	%	ISO 527
Stress at break	50	MPa	ISO 527
Strain at break	72	%	ISO 527
Flexural modulus, 23°C	2300	MPa	ISO 178
Charpy notched impact strength, +23°C	48	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy notched impact strength, -30°C	13	kJ/m <sup>2</sup>	ISO 179/1eA
Izod notched impact strength, +23°C	65	kJ/m <sup>2</sup>	ISO 180/1A
Izod notched impact strength	17	kJ/m <sup>2</sup>	ISO 180/1A
Temperature	-30	°C	-
<b>ASTM Data</b>			
Tensile Modulus	2300	MPa	ASTM D 638
Tensile Strength at Yield	60	MPa	ASTM D 638
Tensile Strength at Break	54	MPa	ASTM D 638
Elongation at Yield	5.5	%	ASTM D 638
Elongation at Break	76	%	ASTM D 638
Flexural Modulus	2320	MPa	ASTM D 790
Izod Impact notched, 1/8 in	750	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Temp. of deflection under load, 1.80 MPa	113	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	126	°C	ISO 75-1/-2
Vicat softening temperature, B	133	°C	ISO 306
Coeff. of linear therm. expansion, parallel	70	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	70	E-6/K	ISO 11359-1/-2
Burning behav. at 1.5 mm nom. thickn.	V-0	class	IEC 60695-11-10
Thickness tested	1.5	mm	-
Yellow Card available	yes	-	-
Burning behav. at thickness h	V-1	class	IEC 60695-11-10
Thickness tested	1.0	mm	-
Yellow Card available	yes	-	-
<b>ASTM Data</b>			
Coefficient of Thermal Expansion, MD	77.4	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	59.4	E-6/K	ASTM D 696
DTUL @ 66 psi	126	°C	ASTM D 648
DTUL @ 264 psi	112	°C	ASTM D 648

Other properties	Value	Unit	Test Standard
Density	1200	kg/m <sup>3</sup>	ISO 1183
Density	1190	kg/m <sup>3</sup>	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	-
Nozzle temperature	265 - 300	°C	-
Screw speed	40 - 70	rpm	-
Back pressure	0.3 - 0.7	MPa	-

## Characteristics

### Processing

Injection Molding

### Special Characteristics

Flame retardant, Halogen-free, High impact or impact modified, Heat stabilized or stable to heat

### Features

Copolymer

### Certifications

Recycled Resin Content

### Regional Availability

North America, Europe, Asia Pacific