

Product Texts

ELCRIN EXL7284RCC polycarbonate (PC) siloxane copolymer resin is a UV stabilized, medium flow, non-chlorinated, non-brominated flame retardant opaque grade with 75% post consumer recycle (PCR) content. This resin offers excellent low temperature ductility (-40 °C), ultra-thin wall flame retardant capability with UL94 V0 at 0.6mm, and in combination with excellent processability and release with opportunities for shorter cycle times compared to standard PC. ELCRIN EXL7284RCC resin is a product available in wide range of opaque colors and excellent candidate for a wide variety of applications.

UL Yellow Card Link: [E207780-104622359](https://www.ul.com/yellow-card/E207780-104622359)

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	15	cm ³ /10min	ISO 1133
Temperature	300	°C	-
Load	1.2	kg	-
ASTM Data			
Melt Flow Index, MFI	16	g/10min	ASTM D 1238
Temperature	300	°C	-
Load	1.6	kg	-
Mold Shrinkage, MD	0.006	mm/mm	ASTM D 955
Mold Shrinkage, TD	0.006	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	2160	MPa	ISO 527
Yield stress	56	MPa	ISO 527
Yield strain	5	%	ISO 527
Stress at break	56	MPa	ISO 527
Strain at break	100	%	ISO 527
Flexural modulus, 23°C	2150	MPa	ISO 178
Flexural strength	82	MPa	ISO 178
Charpy notched impact strength, +23°C, 3mm	74	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C, 3mm	58	kJ/m ²	ISO 179/1eA
Izod notched impact strength, +23°C	69	kJ/m ²	ISO 180/1A
Izod notched impact strength	57	kJ/m ²	ISO 180/1A
Temperature	-30	°C	-
ASTM Data			
Tensile Modulus	2170	MPa	ASTM D 638
Tensile Strength at Yield	55	MPa	ASTM D 638
Tensile Strength at Break	56	MPa	ASTM D 638
Elongation at Yield	5	%	ASTM D 638
Elongation at Break	100	%	ASTM D 638
Flexural Modulus	2210	MPa	ASTM D 790
Flexural Strength	85	MPa	ASTM D 790
Rockwell Hardness	R 117	-	ASTM D 785
Izod Impact notched, 1/8 in	830	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	610	J/m	ASTM D 256
Temperature	-40	°C	-

Thermal properties	Value	Unit	Test Standard
ISO Data			
Burning behav. at thickness h	V-0	class	IEC 60695-11-10
Thickness tested	0.6	mm	-
Yellow Card available	yes	-	-
Burning behav. 5V at thickness h	5VA	class	IEC 60695-11-20
Thickness tested	3.0	mm	-
Yellow Card available	yes	-	-
Glow Wire Flammability Index (GWFI)	960	°C	IEC 60695-2-12
GWFI - thickness tested (1)	1	mm	-
Glow Wire Ignition Temperature (GWIT)	875	°C	IEC 60695-2-13
GWIT - thickness tested (1)	1	mm	-

ASTM Data

UL 94 Flame rating	V-0	-	UL 94
Thickness tested	0.6	mm	-

Electrical properties

	Value	Unit	Test Standard
ASTM Data			
Surface Resistivity	1E16	Ohm	ASTM D 257
Volume Resistivity	1E16	Ohm*cm	ASTM D 257

Other properties

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

Processing Recommendation Injection Molding

	Value	Unit	Test Standard
Pre-drying - Temperature	110	°C	-
Pre-drying - Time	3 - 4	h	-
Processing humidity	≤0.02	%	-
Melt temperature	295 - 315	°C	-
Mold temperature	70 - 95	°C	-
Zone 1	275 - 295	°C	-
Zone 2	280 - 305	°C	-
Zone 3	295 - 315	°C	-
Nozzle temperature	290 - 310	°C	-
Screw speed	40 - 70	rpm	-
Back pressure	0.3 - 0.7	MPa	-

Characteristics**Processing**

Injection Molding

Additives

Release agent

Special Characteristics

Flame retardant, Halogen-free, U.V. stabilized or stable to weather, Opaque

Features

Ductile, Copolymer

Certifications

Recycled Resin Content

Applications

Building Construction, IT / Business Machine, Electrical and Electronical, Sports Equipment

Regional Availability

North America, Europe, Asia Pacific, South and Central America