

Product Texts

ELCRIN DMX6034RCC is an improved scratch resistant polycarbonate copolymer that contains 20% Post consumer recycle content. This medium flow, UV stabilized, custom colorable resin is an excellent candidate for wide variety of electronics, consumer, and industrial applications that require improved scratch resistance.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	9	cm ³ /10min	ISO 1133
Temperature	300	°C	-
Load	1.2	kg	-
ASTM Data			
Melt Flow Index, MFI	10	g/10min	ASTM D 1238
Temperature	300	°C	-
Load	1.2	kg	-
Mold Shrinkage, MD	0.0065	mm/mm	ASTM D 955
Mold Shrinkage, TD	0.0065	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	2070	MPa	ISO 527
Yield stress	60	MPa	ISO 527
Yield strain	6	%	ISO 527
Stress at break	55	MPa	ISO 527
Strain at break	93	%	ISO 527
Flexural modulus, 23°C	2120	MPa	ISO 178
Charpy impact strength, +23°C, 3mm	297	kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C, 3mm	262	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23°C, 3mm	40	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C, 3mm	9	kJ/m ²	ISO 179/1eA
Izod impact strength, +23°C	178	kJ/m ²	ISO 180/1U
Izod notched impact strength, +23°C	37	kJ/m ²	ISO 180/1A
Izod notched impact strength	72	kJ/m ²	ISO 180/1A
Temperature	-30	°C	-
ASTM Data			
Tensile Modulus	2190	MPa	ASTM D 638
Tensile Strength at Yield	61	MPa	ASTM D 638
Tensile Strength at Break	59	MPa	ASTM D 638
Elongation at Yield	7	%	ASTM D 638
Elongation at Break	75	%	ASTM D 638
Flexural Modulus	2100	MPa	ASTM D 790
Izod Impact notched, 1/8 in	515	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	116	J/m	ASTM D 256
Temperature	-30	°C	-
Izod Impact unnotched, 1/8 in	N	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	112	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	129	°C	ISO 75-1/-2
Vicat softening temperature, B	136	°C	ISO 306
Coeff. of linear therm. expansion, parallel	75	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	77	E-6/K	ISO 11359-1/-2
ASTM Data			
Coefficient of Thermal Expansion, MD	75	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	77	E-6/K	ASTM D 696
DTUL @ 66 psi	131	°C	ASTM D 648
DTUL @ 264 psi	117	°C	ASTM D 648
Vicat Temperature	136	°C	ASTM D 1525

Other properties	Value	Unit	Test Standard
Density	1160	kg/m ³	ISO 1183
Water Absorption, 24hr	0.11	%	ASTM D 570
Density	1170	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	290 - 310	°C	-
Mold temperature	60 - 85	°C	-
Zone 1	260 - 280	°C	-
Zone 2	280 - 305	°C	-
Zone 3	290 - 310	°C	-
Nozzle temperature	290 - 310	°C	-

Characteristics

Processing

Injection Molding

Special Characteristics

U.V. stabilized or stable to weather

Features

Scratch Resistant, Copolymer

Certifications

Recycled Resin Content

Applications

Automotive, Electrical and Electronical, Sports Equipment

Regional Availability

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