

LNPTM ELCRINTM DF0033RCCG

ER017069

DESCRIPTION

LNP ELCRIN DF0033RCCG compound is based on Post-Consumer Recycling (PCR) Polycarbonate resin containing glass fiber, Flame retardant. Added features of this grade include: low warpage, good ductility, good processability, lightblocking at 0.5mm, opaque black, Non-Brominated & Non-Chlorinated Flame Retardant. Post-Consumer Recycling (PCR) Polycarbonate content up to 50%, UL 94V2 at 0.6mm and V0 at 3mm in opaque black only, that also incorporates renewable feedstock through ISCC+ mass-balance certification.

GENERAL INFORMATION	
Features	Flame Retardant, Bio-Renewable, Non Cl/Br flame retardant, Non halogenated flame retardant, No PFAS intentionally added (PCR contains <50ppm total organic fluorine content)
Fillers	Glass Fiber (Total fluorine >50ppm only from inorganic fluorine)
Polymer Types	Polycarbonate (PC)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Automotive	Automotive EV Batteries
Electrical and Electronics	Electronic Components, Mobile Phone - Computer - Tablets, Speaker - Earphone, Wireless Communication
Industrial	Electrical, Industrial General

TYPICAL PROPERTY VALUES

Revision 20260907

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL ⁽¹⁾			
Tensile Modulus, 5 mm/min	4700	MPa	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	3.5	%	ASTM D638
Tensile Strain, yld, Type I, 5 mm/min	2.9	%	ASTM D638
Tensile Stress, brk, Type I, 5 mm/min	80	MPa	ASTM D638
Tensile Stress, yld, Type I, 5 mm/min	75	MPa	ASTM D638
Flexural Modulus, 1.3 mm/min, 50 mm span	4500	MPa	ASTM D790
Flexural Stress, yld, 1.3 mm/min, 50 mm span	137	MPa	ASTM D790
Flexural Stress, brk, 1.3 mm/min, 50 mm span	124	MPa	ASTM D790
IMPACT ⁽¹⁾			
Izod Impact, notched 80*10*4 +23°C	6	kJ/m ²	ISO 180/1A
Izod Impact, unnotched 80*10*4 +23°C	40	kJ/m ²	ISO 180/1U
Izod Impact, notched, 23°C	50	J/m	ASTM D256
Izod Impact, unnotched, 23°C	600	J/m	ASTM D4812
THERMAL ⁽¹⁾			
HDT, 1.82 MPa, 3.2mm, unannealed	118	°C	ASTM D648
HDT, 0.45 MPa, 3.2 mm, unannealed	121	°C	ASTM D648
CTE, -30°C to 80°C, flow	3.6E-05	1/°C	ASTM E831
CTE, -30°C to 80°C, xflow	6.8E-05	1/°C	ASTM E831
Relative Temp Index, Elec	80	°C	UL 746B

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Relative Temp Index, Mech w/impact	80	°C	UL 746B
Relative Temp Index, Mech w/o impact	80	°C	UL 746B
PHYSICAL ⁽¹⁾			
Density	1.31	g/cm ³	ISO 1183
Mold Shrinkage, xflow, 24 hrs ⁽²⁾	0.1 – 0.3	%	ISO 294
Mold Shrinkage, flow, 24 hrs ⁽²⁾	0.2 – 0.4	%	ISO 294
Melt Volume Rate, MVR at 300°C/1.2 kg	12	cm ³ /10 min	ASTM D1238
Specific Gravity	1.31	-	ASTM D792
FLAME CHARACTERISTICS ⁽³⁾			
UL Recognized, 94V-2 Flame Class Rating	0.6	mm	UL 94
UL Recognized, 94V-0 Flame Class Rating	3	mm	UL 94
UL Yellow Card Link	E207780-10221962	-	-
INJECTION MOLDING ⁽⁴⁾			
Drying Temperature	110 – 120	°C	
Drying Time	4 – 6	Hrs	
Melt Temperature	285 – 310	°C	
Rear - Zone 1 Temperature	260 – 280	°C	
Middle - Zone 2 Temperature	270 – 290	°C	
Front - Zone 3 Temperature	280 – 300	°C	
Nozzle Temperature	285 – 305	°C	
Mold Temperature	80 – 110	°C	

- (1) The information stated on Technical Datasheets should be used as indicative only for material selection purposes and not be utilized as specification or used for part or tool design.
- (2) Measurements made from laboratory test coupon. Actual shrinkage may vary outside of range due to differences in processing conditions, equipment, part geometry and tool design. It is recommended that mold shrinkage studies be performed with surrogate or legacy tooling prior to cutting tools for new molded article.
- (3) UL Ratings shown on the technical datasheet might not cover the full range of thicknesses and colors. For details, please see the UL Yellow Card.
- (4) Injection Molding parameters are only mentioned as general guidelines. These may not apply or may need adjustment in specific situations such as low shot sizes, large part molding, thin wall molding and gas-assist molding.

DISCLAIMER

Any sale by SABIC, its subsidiaries and affiliates (each a "seller"), is made exclusively under seller's standard conditions of sale (available upon request) unless agreed otherwise in writing and signed on behalf of the seller. While the information contained herein is given in good faith, SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY AND NONINFRINGEMENT OF INTELLECTUAL PROPERTY, NOR ASSUMES ANY LIABILITY, DIRECT OR INDIRECT, WITH RESPECT TO THE PERFORMANCE, SUITABILITY OR FITNESS FOR INTENDED USE OR PURPOSE OF THESE PRODUCTS IN ANY APPLICATION. Each customer must determine the suitability of seller materials for the customer's particular use through appropriate testing and analysis. No statement by seller concerning a possible use of any product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right.