ULTEM™ Resin CRS5201R

REGION ASIA

DESCRIPTION

20% Glass fiber filled, standard flow Polyetherimide copolymer (Tg 225C) with internal mold release and enhanced chemical resistance to strong acids, bases, aromatics, and ketones. ECO Conforming.

INDUSTRY	SUB INDUSTRY
Automotive	Heavy Truck, Automotive Under the Hood, Aerospace, Motorcycle, Recreational/Specialty Vehicles
Building and Construction	Building Component
Consumer	Personal Accessory, Home Appliances, Commercial Appliance
Electrical and Electronics	Energy Management, Drone Solutions, Mobile Phone - Computer - Tablets, Circuit Boards/Additives, Printer Copier, Speaker - Earphone
Industrial	Electrical, Material Handling
Mass Transportation	Rail
Packaging	Industrial Packaging

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, brk, Type I, 5 mm/min	131	MPa	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	5	%	ASTM D638
Tensile Modulus, 5 mm/min	6890	MPa	ASTM D638
Flexural Stress, yld, 2.6 mm/min, 100 mm span	213	MPa	ASTM D790
Flexural Modulus, 2.6 mm/min, 100 mm span	6890	MPa	ASTM D790
IMPACT			
Izod Impact, notched, 23°C	74	J/m	ASTM D256
Izod Impact, Reverse Notched, 3.2 mm	480	J/m	ASTM D256
THERMAL			
HDT, 1.82 MPa, 6.4 mm, unannealed	218	°C	ASTM D648
CTE, -40°C to 150°C, flow	2.7E-05	1/°C	ISO 11359-2
CTE, -40°C to 150°C, xflow	5.8E-05	1/°C	ISO 11359-2
Relative Temp Index, Elec [1]	105	°C	UL 746B
Relative Temp Index, Mech w/impact [1]	105	°C	UL 746B
Relative Temp Index, Mech w/o impact [1]	105	°C	UL 746B
PHYSICAL			
Specific Gravity	1.42	-	ASTM D792
Melt Flow Rate, 337°C/6.6 kgf	3.1	g/10 min	ASTM D1238
ELECTRICAL			
Comparative Tracking Index (UL) {PLC}	4	PLC Code	UL 746A
Hot-Wire Ignition (HWI), PLC 2	≥3	mm	UL 746A
Hot-Wire Ignition (HWI), PLC 3	≥1.5	mm	UL 746A
High Amp Arc Ignition (HAI), PLC 3	≥1.5	mm	UL 746A
High Amp Arc Ignition (HAI), PLC 4	≥3	mm	UL 746A

© 2026 Copyright by SABIC. All rights reserved

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
High Voltage Arc Track Rate {PLC}	4	PLC Code	UL 746A
Arc Resistance, Tungsten {PLC}	5	PLC Code	ASTM D495
FLAME CHARACTERISTICS [1]			
UL Yellow Card Link	E121562-103873032	-	-
UL Recognized, 94V-0 Flame Class Rating	≥1.5	mm	UL 94
INJECTION MOLDING			
Drying Temperature	150	°C	
Drying Time	4 – 6	Hrs	
Drying Time (Cumulative)	24	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	365 – 390	°C	
Nozzle Temperature	360 – 380	°C	
Front - Zone 3 Temperature	365 – 390	°C	
Middle - Zone 2 Temperature	355 – 375	°C	
Rear - Zone 1 Temperature	345 – 365	°C	
Mold Temperature	135 – 165	°C	
Back Pressure	0.3 – 0.7	MPa	
Screw Speed	40 – 70	rpm	
Shot to Cylinder Size	40 – 60	%	
Vent Depth	0.025 – 0.076	mm	

(1) 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.

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.

© 2026 Copyright by SABIC. All rights reserved