

CYCOLACT™ RESIN BDT5510

REGION AMERICAS

DESCRIPTION

Automotive. High heat resistance, low gloss, color concentratable for interior applications. Natural only.

TYPICAL PROPERTY VALUES

Revision 20210819

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	53	MPa	ASTM D638
Tensile Modulus, 5 mm/min	2270	MPa	ASTM D638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	81	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	2460	MPa	ASTM D790
Tensile Stress, yield, 50 mm/min	43	MPa	ISO 527
Tensile Modulus, 1 mm/min	2930	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	67	MPa	ISO 178
Flexural Modulus, 2 mm/min	2030	MPa	ISO 178
IMPACT			
Izod Impact, notched, 23°C	293	J/m	ASTM D256
Falling Dart Impact (D 3029), 23°C	35	J	ASTM D3029
Izod Impact, notched 80°10'4 +23°C	12	kJ/m²	ISO 180/1A
Izod Impact, notched 80°10'4 -30°C	7	kJ/m²	ISO 180/1A
Charpy 23°C, V-notch Edgew 80°10'4 sp=62mm	13	kJ/m²	ISO 179/1eA
Charpy -30°C, V-notch Edgew 80°10'4 sp=62mm	7	kJ/m²	ISO 179/1eA
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	92	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	81	°C	ASTM D648
CTE, -40°C to 60°C, flow	1.35E-04	1/°C	ASTM E831
Vicat Softening Temp, Rate B/50	98	°C	ISO 306
HDT/Bf, 0.45 MPa Flatw 80°10'4 sp=64mm	95	°C	ISO 75/Bf
HDT/ Af, 1.8 MPa Flatw 80°10'4 sp=64mm	83	°C	ISO 75/ Af
PHYSICAL			
Specific Gravity	1.05	-	ASTM D792
Mold Shrinkage, flow, 3.2 mm	0.5 – 0.8	%	SABIC method
Melt Flow Rate, 230°C/3.8 kg	6	g/10 min	ASTM D1238
Melt Viscosity, 260°C, 1000 sec-1	1630	Poise	ASTM D3825
Spiral Flow, 260°C, 10 ips, 3.175 X 1524 mm	736.6	mm	-
Melt Flow Rate, 220°C/10.0 kg	14	g/10 min	ISO 1133
OPTICAL			
Gloss, untextured, 60 degrees	25	-	ASTM D523
FLAME CHARACTERISTICS			
UL Yellow Card Link	E121562-101094442	-	-
UL Recognized, 94HB Flame Class Rating	1.52	mm	UL 94
INJECTION MOLDING			

© 2024 Copyright by SABIC. All rights reserved

CHEMISTRY THAT MATTERS™



PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Drying Temperature	90 – 95	°C	
Drying Time	2 – 4	Hrs	
Drying Time (Cumulative)	8	Hrs	
Maximum Moisture Content	0.1	%	
Melt Temperature	230 – 275	°C	
Nozzle Temperature	230 – 275	°C	
Front - Zone 3 Temperature	220 – 255	°C	
Middle - Zone 2 Temperature	210 – 250	°C	
Rear - Zone 1 Temperature	195 – 240	°C	
Mold Temperature	50 – 80	°C	
Back Pressure	0.3 – 0.7	MPa	
Screw Speed	30 – 60	rpm	
Shot to Cylinder Size	50 – 70	%	
Vent Depth	0.038 – 0.051	mm	

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 NON-INFRINGEMENT 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.

