

CYCOLOY™ RESIN C4210HF

REGION EUROPE

DESCRIPTION

PC+ABS Blend with 10% Glass Reinforce. High flow, High heat resistance., Excellent balance strength/rigidity. Good impact/appearance.

TYPICAL PROPERTY VALUES

Revision 20200108

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yield, 5 mm/min	90	MPa	ISO 527
Tensile Stress, break, 5 mm/min	90	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	3.2	%	ISO 527
Tensile Strain, break, 5 mm/min	3.2	%	ISO 527
Tensile Modulus, 1 mm/min	4700	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	125	MPa	ISO 178
Flexural Stress, break, 2 mm/min	135	MPa	ISO 178
Flexural Modulus, 2 mm/min	4250	MPa	ISO 178
Ball Indentation Hardness, H358/30	116	MPa	ISO 2039-1
Hardness, Rockwell R	121	-	ISO 2039-2
IMPACT			
Izod Impact, unnotched 80*10*3 +23°C	20	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*3 +23°C	8	kJ/m²	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*3 sp=62mm	8	kJ/m²	ISO 179/1eA
Charpy 23°C, Unnotch Edgew 80*10*3 sp=62mm	20	kJ/m²	ISO 179/1eU
THERMAL			
Thermal Conductivity	0.2	W/m.°C	ISO 8302
CTE, -40°C to 40°C, flow	4.E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	8.E-05	1/°C	ISO 11359-2
Ball Pressure Test, 75°C +/- 2°C	PASSES	-	IEC 60695-10-2
Ball Pressure Test, 125°C +/- 2°C	PASSES	-	IEC 60695-10-2
Vicat Softening Temp, Rate B/50	134	°C	ISO 306
Vicat Softening Temp, Rate B/120	136	°C	ISO 306
HDT/Be, 0.45MPa Edgew 120*10*4 sp=100mm	133	°C	ISO 75/Be
HDT/Ae, 1.8 MPa Edgew 120*10*4 sp=100mm	123	°C	ISO 75/Ae
Relative Temp Index, Elec	60	°C	UL 746B
Relative Temp Index, Mech w/impact	60	°C	UL 746B
Relative Temp Index, Mech w/o impact	60	°C	UL 746B
PHYSICAL			
Mold Shrinkage on Tensile Bar, flow	0.3 – 0.5	%	SABIC method
Density	1.22	g/cm³	ISO 1183
Water Absorption, (23°C/saturated)	0.6	%	ISO 62-1
Moisture Absorption (23°C / 50% RH)	0.2	%	ISO 62
Melt Volume Rate, MVR at 260°C/5.0 kg	33	cm³/10 min	ISO 1133
ELECTRICAL			

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Volume Resistivity	>1.E+15	Ω .cm	IEC 60093
Surface Resistivity, ROA	>1.E+15	Ω	IEC 60093
INJECTION MOLDING			
Drying Temperature	100 – 110	$^{\circ}\text{C}$	
Drying Time	2 – 4	Hrs	
Melt Temperature	240 – 280	$^{\circ}\text{C}$	
Mold Temperature	50 – 80	$^{\circ}\text{C}$	

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.