

CYCOLOY™ RESIN MC8100

REGION AMERICAS

DESCRIPTION

PC/ABS, extrusion and blow molding grade.

TYPICAL PROPERTY VALUES

Revision 20230725

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 50 mm/min	52	MPa	ASTM D638
Tensile Strain, yld, Type I, 50 mm/min	5	%	ASTM D638
Tensile Strain, brk, Type I, 50 mm/min	100	%	ASTM D638
Tensile Modulus, 50 mm/min	2060	MPa	ASTM D638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	77	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	2060	MPa	ASTM D790
IMPACT			
Izod Impact, notched, 23°C	534	J/m	ASTM D256
Izod Impact, notched, -30°C	427	J/m	ASTM D256
Instrumented Dart Impact Total Energy, 23°C	54	J	ASTM D3763
Instrumented Dart Impact Total Energy, -30°C	47	J	ASTM D3763
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	123	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	104	°C	ASTM D648
CTE, -40°C to 40°C, flow	8.1E-05	1/°C	ASTM E831
Thermal Conductivity	0.2	W/m·°C	ASTM C177
PHYSICAL			
Specific Gravity	1.13	-	ASTM D792
Water Absorption, (23°C/24hrs)	0.1	%	ASTM D570
Water Absorption, (23°C/Saturated)	0.4	%	ASTM D570
Mold Shrinkage, flow, 3.2 mm	0.4 – 0.7	%	SABIC method
Melt Flow Rate, 260°C/5.0 kgf	4	g/10 min	ASTM D1238
EXTRUSION BLOW MOLDING			
Drying Temperature	100 – 110	°C	
Drying Time	3 – 4	Hrs	
Drying Time (Cumulative)	24	Hrs	
Maximum Moisture Content	0.04 – 0.05	%	
Minimum Moisture Content	0.04	%	
Melt Temperature (Parison)	245 – 260	°C	
Barrel - Zone 1 Temperature	240 – 250	°C	
Barrel - Zone 2 Temperature	240 – 255	°C	
Barrel - Zone 3 Temperature	240 – 255	°C	
Barrel - Zone 4 Temperature	240 – 255	°C	
Adapter - Zone 5 Temperature	245 – 260	°C	
Head - Zone 6 - Top Temperature	245 – 260	°C	

© 2024 Copyright by SABIC. All rights reserved

CHEMISTRY THAT MATTERS™



PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Head - Zone 7 - Bottom Temperature	245 – 260	°C	
Screw Speed	20 – 50	rpm	
Extruder Feed Zone Temperature	60 – 80	°C	
Mold Temperature	40 – 90	°C	
Die Temperature	250 – 265	°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.

