

CYCOLACT™ RESIN X11HF

REGION ASIA

DESCRIPTION

Automotive: High heat resistance. Excellent flow/impact balance. High gloss.

TYPICAL PROPERTY VALUES

Revision 20250912

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	45	MPa	ASTM D638
Tensile Stress, brk, Type I, 5 mm/min	30	MPa	ASTM D638
Tensile Strain, yld, Type I, 5 mm/min	2.6	%	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	35	%	ASTM D638
Tensile Modulus, 5 mm/min	2300	MPa	ASTM D638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	70	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	2300	MPa	ASTM D790
Hardness, Rockwell R	108	-	ASTM D785
Tensile Stress, yield, 50 mm/min	45	MPa	ISO 527
Tensile Stress, break, 50 mm/min	30	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	2.6	%	ISO 527
Tensile Strain, break, 50 mm/min	30	%	ISO 527
Tensile Modulus, 1 mm/min	2200	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	65	MPa	ISO 178
Flexural Modulus, 2 mm/min	2250	MPa	ISO 178
IMPACT			
Izod Impact, notched, 23°C	280	J/m	ASTM D256
Izod Impact, notched, 0°C	160	J/m	ASTM D256
Izod Impact, notched, -20°C	115	J/m	ASTM D256
Izod Impact, notched, -30°C	90	J/m	ASTM D256
Izod Impact, notched, 23°C, 6.4mm	240	J/m	ASTM D256
Izod Impact, notched 80°10°4 +23°C	25	kJ/m²	ISO 180/1A
Izod Impact, notched 80°10°4 -30°C	15	kJ/m²	ISO 180/1A
Izod Impact, notched 80°10°4 -40°C	12	kJ/m²	ISO 180/1A
Charpy 23°C, V-notch Edgew 80°10°4 sp=62mm	24	kJ/m²	ISO 179/1eA
Charpy -30°C, V-notch Edgew 80°10°4 sp=62mm	10	kJ/m²	ISO 179/1eA
THERMAL			
HDT, 0.45 MPa, 3.2 mm ⁽¹⁾	101	°C	ASTM D648
HDT, 1.82 MPa, 3.2 mm ⁽¹⁾	96	°C	ASTM D648
HDT, 1.82 MPa, 6.4 mm, unannealed	99	°C	ASTM D648
Vicat Softening Temp, Rate B/50	98	°C	ISO 306
Vicat Softening Temp, Rate B/120	102	°C	ISO 306
HDT/Af, 1.8 MPa Flatw 80°10°4 sp=64mm	98	°C	ISO 75/Af
Relative Temp Index, Elec	60	°C	UL 746B
Relative Temp Index, Mech w/impact	60	°C	UL 746B

© 2025 Copyright by SABIC. All rights reserved

CHEMISTRY THAT MATTERS™



PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Relative Temp Index, Mech w/o impact	60	°C	UL 746B
PHYSICAL			
Specific Gravity	1.04	-	ASTM D792
Mold Shrinkage, flow, 3.2 mm	0.4 – 0.7	%	SABIC method
Melt Flow Rate, 230°C/3.8 kg	8	g/10 min	ASTM D1238
Melt Flow Rate, 260°C/5.0 kgf	38	g/10 min	ASTM D1238
Melt Flow Rate, 220°C/10.0 kg	30	g/10 min	ISO 1133
FLAME CHARACTERISTICS			
UL Recognized, 94HB Flame Class Rating	1.5	mm	UL 94
INJECTION MOLDING			
Drying Temperature	80 – 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 – 270	°C	
Front - Zone 3 Temperature	230 – 260	°C	
Middle - Zone 2 Temperature	210 – 250	°C	
Rear - Zone 1 Temperature	190 – 210	°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	

(1) Annealed (80 oC, 4 hrs)

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.

