

XENOY™ RESIN 1760H

REGION ASIA

DESCRIPTION

XENOY™ 1760H resin is a 11% glass fiber reinforced polycarbonate / polybutylene terephthalate (PC/PBT). Impact modified, chemically resistant. Excellent physical property retention in automotive exteriors.

TYPICAL PROPERTY VALUES

Revision 20230418

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yield, 5 mm/min	80	MPa	ISO 527
Tensile Stress, break, 5 mm/min	80	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	3	%	ISO 527
Tensile Strain, break, 5 mm/min	3	%	ISO 527
Tensile Modulus, 1 mm/min	4200	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	127	MPa	ISO 178
Flexural Modulus, 2 mm/min	4000	MPa	ISO 178
Tensile Stress, yld, Type I, 5 mm/min	80	MPa	ASTM D638
Tensile Stress, brk, Type I, 5 mm/min	80	MPa	ASTM D638
Tensile Strain, yld, Type I, 5 mm/min	3	%	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	3	%	ASTM D638
Tensile Modulus, 5 mm/min	4200	MPa	ASTM D638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	127	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	4000	MPa	ASTM D790
IMPACT			
Izod Impact, notched 80*10*4 +23°C	10	kJ/m²	ISO 180/1A
Izod Impact, notched 80*10*4 0°C	8	kJ/m²	ISO 180/1A
Izod Impact, notched 80*10*4 -30°C	8	kJ/m²	ISO 180/1A
Izod Impact, unnotched 80*10*4 +23°C	50	kJ/m²	ISO 180/1U
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	10	kJ/m²	ISO 179/1eA
Charpy 0°C, V-notch Edgew 80*10*4 sp=62mm	8	kJ/m²	ISO 179/1eA
Charpy -30°C, V-notch Edgew 80*10*4 sp=62mm	8	kJ/m²	ISO 179/1eA
Charpy 23°C, Unnotch Edgew 80*10*4 sp=62mm	45	kJ/m²	ISO 179/1eU
Izod Impact, notched, 23°C	120	J/m	ASTM D256
Izod Impact, notched, 0°C	100	J/m	ASTM D256
Izod Impact, notched, -30°C	100	J/m	ASTM D256
Izod Impact, unnotched, 23°C	600	J/m	ASTM D4812
THERMAL			
Vicat Softening Temp, Rate B/50	130	°C	ISO 306
Vicat Softening Temp, Rate B/120	130	°C	ISO 306
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	101	°C	ISO 75/Af
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	117	°C	ISO 75/Bf
CTE, -40°C to 40°C, flow	43	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	80	1/°C	ISO 11359-2

© 2024 Copyright by SABIC. All rights reserved

CHEMISTRY THAT MATTERS™



PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Vicat Softening Temp, Rate B/50	130	°C	ASTM D1525
HDT, 1.82 MPa, 3.2mm, unannealed	101	°C	ASTM D648
CTE, -40°C to 40°C, flow	43	1/°C	ASTM E831
CTE, -40°C to 40°C, xflow	80	1/°C	ASTM E831
PHYSICAL			
Density	1.3	g/cm³	ISO 1183
Melt Volume Rate, MVR at 250°C/5.0 kg	9	cm³/10 min	ISO 1133
Melt Volume Rate, MVR at 265°C/5.0 kg	15	cm³/10 min	ISO 1133
Water Absorption, (23°C/saturated)	0.5	%	ISO 62-1
Moisture Absorption (23°C / 50% RH)	0.15	%	ISO 62
Specific Gravity	1.3	-	ASTM D792
Melt Flow Rate, 250°C/5.0 kgf	12	g/10 min	ASTM D1238
Melt Flow Rate, 265°C/5.0 kgf	18	g/10 min	ASTM D1238
Water Absorption, (23°C/24hrs)	0.20	%	ASTM D570
Moisture Absorption, (23°C/50% RH/24 hrs)	0.10	%	ASTM D570
Mold Shrinkage, flow, 3.2 mm	0.4 – 0.6	%	SABIC method
Mold Shrinkage, xflow, 3.2 mm	0.4 – 0.6	%	SABIC method
INJECTION MOLDING			
Drying Temperature	110	°C	
Drying Time	4 – 6	Hrs	
Drying Time (Cumulative)	8	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	260 – 280	°C	
Nozzle Temperature	255 – 275	°C	
Front - Zone 3 Temperature	260 – 280	°C	
Middle - Zone 2 Temperature	255 – 275	°C	
Rear - Zone 1 Temperature	250 – 270	°C	
Mold Temperature	65 – 95	°C	
Back Pressure	0.3 – 0.6	MPa	
Screw Speed	50 – 80	rpm	
Shot to Cylinder Size	50 – 80	%	
Vent Depth	0.013 – 0.02	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 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.

