XENOY™ RESIN X2500UV

REGION EUROPE

DESCRIPTION

XENOY X2500UV is a medium viscosity, unfilled, UV stabilized, elastomer modified PC/PET blend with excellent heat and impact performance. ISO1043-label: PC+PET-I.

TYPICAL PROPERTY VALUES

Revision 20180807

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yield	53	MPa	ASTM D638
Tensile Stress, yld, Type I, 50 mm/min	56	MPa	ASTM D638
Tensile Stress, brk, Type I, 50 mm/min	55	MPa	ASTM D638
Tensile Strain, yield	5	%	ASTM D638
Tensile Strain, break	100	%	ASTM D638
Tensile Strain, yld, Type I, 50 mm/min	5	%	ASTM D638
Tensile Strain, brk, Type I, 50 mm/min	80	%	ASTM D638
Tensile Modulus, 50 mm/min	2200	MPa	ASTM D638
Flexural Stress	79	MPa	ASTM D790
Flexural Stress, yld, 1.3 mm/min, 50 mm span	79	MPa	ASTM D790
Flexural Modulus	2100	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	2150	MPa	ASTM D790
Taber Abrasion, CS-17, 1 kg	20	mg/1000cy	SABIC method
Tensile Stress, yield, 50 mm/min	57	MPa	ISO 527
Tensile Stress, break, 50 mm/min	56	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	5	%	ISO 527
Tensile Strain, break, 50 mm/min	70	%	ISO 527
Tensile Modulus, 1 mm/min	2200	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	80	MPa	ISO 178
Flexural Modulus, 2 mm/min	2150	MPa	ISO 178
Ball Indentation Hardness, H358/30	95	MPa	ISO 2039-1
IMPACT			
Izod Impact, notched, 23°C	600	J/m	ASTM D256
Izod Impact, notched, 0°C	450	J/m	ASTM D256
Izod Impact, notched, -30°C	200	J/m	ASTM D256
Instrumented Dart Impact Total Energy, 23°C	60	J	ASTM D3763
Izod Impact, unnotched 80*10*4 -30°C	NB	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	40	kJ/m²	ISO 180/1A
Izod Impact, notched 80*10*4 -30°C	25	kJ/m²	ISO 180/1A
Izod Impact, notched 80*10*4 -40°C	15	kJ/m²	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	50	kJ/m²	ISO 179/1eA
Charpy -30°C, V-notch Edgew 80*10*4 sp=62mm	30	kJ/m²	ISO 179/1eA
Charpy -30°C, Unnotch Edgew 80*10*4 sp=62mm	NB	kJ/m²	ISO 179/1eU
THERMAL			

© 2024 Copyright by SABIC. All rights reserved

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Vicat Softening Temp, Rate B/50	135	°C	ASTM D1525
HDT, 1.82 MPa, 3.2mm, unannealed	108	°C	ASTM D648
CTE, -40°C to 40°C, flow	8.E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, xflow	8.5E-05	1/°C	ASTM E831
Thermal Conductivity	0.18	W/m-°C	ISO 8302
CTE, 23°C to 80°C, flow	8.2E-05	1/°C	ISO 11359-2
CTE, 23°C to 80°C, xflow	8.7E-05	1/°C	ISO 11359-2
Ball Pressure Test, 125°C +/- 2°C	PASSES	-	IEC 60695-10-2
Vicat Softening Temp, Rate A/50	145	°C	ISO 306
Vicat Softening Temp, Rate B/50	135	°C	ISO 306
Vicat Softening Temp, Rate B/120	136	°C	ISO 306
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	108	°C	ISO 75/Af
PHYSICAL			
Specific Gravity	1.21	-	ASTM D792
Mold Shrinkage on Tensile Bar, flow	0.5 – 0.8	%	SABIC method
Mold Shrinkage, flow, 3.2 mm	0.5 – 0.8	%	SABIC method
Mold Shrinkage on Tensile Bar, xflow	0.5 – 0.8	%	SABIC method
Melt Flow Rate, 265°C/2.16kgf	9	g/10 min	ASTM D1238
Density	1.21	g/cm³	ISO 1183
Water Absorption, (23°C/saturated)	0.7	%	ISO 62-1
Moisture Absorption (23°C / 50% RH)	0.2	%	ISO 62
Melt Volume Rate, MVR at 265°C/1.2 kg	4	cm³/10 min	ISO 1133
ELECTRICAL			
Volume Resistivity	>1.E+14	Ω.cm	IEC 60093
Surface Resistivity, ROA	>1.E+15	Ω	IEC 60093
Dielectric Strength, in oil, 3.2 mm	17	kV/mm	IEC 60243-1
Relative Permittivity, 1 MHz	3.1	-	IEC 60250
Dissipation Factor, 50/60 Hz	0.002	-	IEC 60250
Dissipation Factor, 1 MHz	0.02	-	IEC 60250
Relative Permittivity, 50/60 Hz	3.3	-	IEC 60250
FLAME CHARACTERISTICS			
UL Compliant, 94HB Flame Class Rating	1.5	mm	UL 94 by SABIC-IP
Glow Wire Flammability Index 750°C, passes at	2.7	mm	IEC 60695-2-12
INJECTION MOLDING			
Drying Temperature	110 – 120	°C	
Drying Time	4 – 6	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	265 – 275	°C	
Nozzle Temperature	260 – 275	°C	
Front - Zone 3 Temperature	260 – 280	°C	
Middle - Zone 2 Temperature	250 – 275	°C	
Rear - Zone 1 Temperature	240 – 270	°C	
Hopper Temperature	60 – 80	°C	
Mold Temperature	60 – 100	°C	

© 2024 Copyright by SABIC. All rights reserved

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.

© 2024 Copyright by SABIC. All rights reserved