

Xenoy* Resin XD1432G

Europe-Africa-Middle East: COMMERCIAL

Xenoy XD1432G is a semicrystalline PBT-PC blend with excellent low temperature impact and high shrinkage. For solvent based painted bumpersystems.

Property

TYPICAL PROPERTIES ⁽¹⁾			
MECHANICAL	Value	Unit	Standard
Taber Abrasion, CS-17, 1 kg	40	mg/1000cy	SABIC Method
Tensile Stress, yield, 50 mm/min	40	MPa	ISO 527
Tensile Stress, break, 50 mm/min	40	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	3.5	%	ISO 527
Tensile Strain, break, 50 mm/min	150	%	ISO 527
Tensile Modulus, 1 mm/min	2000	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	65	MPa	ISO 178
Flexural Modulus, 2 mm/min	1900	MPa	ISO 178
Hardness, H358/30	80	MPa	ISO 2039-1
IMPACT	Value	Unit	Standard
Izod Impact, notched 80*10*4 +23°C	65	kJ/m ²	ISO 180/1A
Izod Impact, notched 80*10*4 -20°C	60	kJ/m ²	ISO 180/1A
Izod Impact, notched 80*10*4 -30°C	55	kJ/m ²	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	65	kJ/m ²	ISO 179/1eA
Charpy -30°C, V-notch Edgew 80*10*4 sp=62mm	20	kJ/m ²	ISO 179/1eA
THERMAL	Value	Unit	Standard
Thermal Conductivity	0.2	W/m-°C	ISO 8302
CTE, 23°C to 80°C, flow	9.E-05	1/°C	ISO 11359-2
CTE, 23°C to 80°C, xflow	9.E-05	1/°C	ISO 11359-2
Vicat Softening Temp, Rate A/50	200	°C	ISO 306
Vicat Softening Temp, Rate B/50	117	°C	ISO 306
Vicat Softening Temp, Rate B/120	120	°C	ISO 306
PHYSICAL	Value	Unit	Standard
Mold Shrinkage on Tensile Bar, flow (2) (5)	1.2 - 1.6	%	SABIC Method
Mold Shrinkage on Tensile Bar, xflow (2) (5)	1.2 - 1.6	%	SABIC Method
Density	1.22	g/cm ³	ISO 1183
Water Absorption, (23°C/sat)	0.5	%	ISO 62
Moisture Absorption (23°C / 50% RH)	0.2	%	ISO 62
Melt Volume Rate, MVR at 250°C/5.0 kg	12	cm ³ /10 min	ISO 1133
ELECTRICAL	Value	Unit	Standard
Volume Resistivity	>1.E+14	Ohm-cm	IEC 60093
Surface Resistivity, ROA	>1.E+15	Ohm	IEC 60093
Dielectric Strength, in oil, 3.2 mm	17	kV/mm	IEC 60243-1
Relative Permittivity, 50/60 Hz	3.3	-	IEC 60250
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
FLAME CHARACTERISTICS	Value	Unit	Standard

UL Compliant, 94HB Flame Class Rating (3)(4)	1.5	mm	UL 94 by GE
--	-----	----	-------------

Source GMD, last updated:2009/08/10

Processing

Parameter	Value	Unit
Injection Molding		
Drying Temperature	90 - 100	°C
Drying Time	2 - 4	hrs
Maximum Moisture Content	0.02	%
Melt Temperature	255 - 270	°C
Nozzle Temperature	250 - 265	°C
Front - Zone 3 Temperature	250 - 270	°C
Middle - Zone 2 Temperature	240 - 265	°C
Rear - Zone 1 Temperature	230 - 250	°C
Hopper Temperature	40 - 60	°C
Mold Temperature	60 - 80	°C

Source GMD, last updated:2009/08/10

THESE PROPERTY VALUES ARE NOT INTENDED FOR SPECIFICATION PURPOSES.

PLEASE CHECK WITH YOUR [\(LOCAL SALES OFFICE\)](#) FOR AVAILABILITY IN YOUR REGION

(1) Typical values only. Variations within normal tolerances are possible for various colors. All values are measured after at least 48 hours storage at 23°C/50% relative humidity. All properties, except the melt volume and melt flow rates, are measured on injection molded samples. All samples tested under ISO test standards are prepared according to ISO 294.

(2) Only typical data for selection purposes. Not to be used for part or tool design.

(3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.

(4) Internal measurements according to UL standards.

(5) Measurements made from laboratory test coupon. Actual shrinkage may vary outside of range due to differences in processing conditions, equipment, part geometry and tool design. It is recommended that mold shrinkage studies be performed with surrogate or legacy tooling prior to cutting tools for new molded article.

Disclaimer : All information, recommendation or advice given by SABIC Innovative Plastics, or any of its subsidiaries, affiliates or authorized representatives, whether written or oral, is given in good faith, to the best of its knowledge and based on current procedures in effect. Each user of the products shall convince himself, through all available sources (including finished product testing in its appropriate environment) of the suitability of the products supplied for its own particular purpose. Because actual use of the products by the user is beyond the control of SABIC Innovative Plastics Company, its subsidiaries and affiliates, such use is in the exclusive responsibility of the user. SABIC Innovative Plastics Company, its subsidiaries and affiliates cannot be held responsible respectively liable for any loss incurred through incorrect or faulty use of the products. Information, recommendations and/or advice are neither made to infringe on any patents, nor to grant a license under any patent or intellectual property right of SABIC Innovative Plastics Company or any of its subsidiaries or affiliated companies, nor to grant the right to file for any patent protection.

* Xenoy is a trademark of the SABIC Innovative Plastics Company

© 1997-2010 SABIC Innovative Plastics Company. All rights reserved