



## Xenoy\* Resin X5630

**Americas: COMMERCIAL** 

Mineral filled PC/PET blend with high heat dimensional stability, low shrinkage and low CTE, especially for painted applications

## **Property**

TYPICAL PROPERTIES (1)			
MECHANICAL	Value	Unit	Standard
Tensile Stress, yld, Type I, 5 mm/min	55	MPa	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	50	MPa	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	3.2	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	10	%	ASTM D 638
Tensile Modulus, 5 mm/min	4400	MPa	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	90	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	4200	MPa	ASTM D 790
Tensile Stress, yield, 5 mm/min	56	MPa	ISO 527
Tensile Stress, break, 5 mm/min	50	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	3.2	%	ISO 527
Tensile Strain, break, 5 mm/min	8	%	ISO 527
Tensile Modulus, 1 mm/min	4300	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	90	MPa	ISO 178
Flexural Modulus, 2 mm/min	4200	MPa	ISO 178
IMPACT	Value	Unit	Standard
Izod Impact, notched, 23°C	80	J/m	ASTM D 256
Izod Impact, notched, -30°C	60	J/m	ASTM D 256
Instrumented Impact Total Energy, 23°C	45	J	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	100	kJ/m²	ISO 180/1U
Izod Impact, unnotched 80*10*4 -30°C	80	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	8	kJ/m²	ISO 180/1A
Izod Impact, notched 80*10*4 -30°C	6	kJ/m²	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	6	kJ/m²	ISO 179/1eA
THERMAL	Value	Unit	Standard
Vicat Softening Temp, Rate B/50	138	°C	ASTM D 1525
HDT, 1.82 MPa, 3.2mm, unannealed	112	°C	ASTM D 648
CTE, -40°C to 40°C, flow	4.3E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	6.4E-05	1/°C	ASTM E 831
CTE, -30°C to 80°C, flow	4.8E-05	1/°C	ISO 11359-2
CTE, -30°C to 80°C, xflow	6.8E-05	1/°C	ISO 11359-2
CTE, 23°C to 80°C, flow	4.8E-05	1/°C	ISO 11359-2
CTE, 23°C to 80°C, xflow	6.8E-05	1/°C	ISO 11359-2
Vicat Softening Temp, Rate B/50	138	°C	ISO 306
Vicat Softening Temp, Rate B/120	140	°C	ISO 306
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	112	°C	ISO 75/Af
PHYSICAL	Value	Unit	Standard
Specific Gravity	1.35	-	ASTM D 792
Mold Shrinkage, flow, 3.2 mm	0.5 - 0.6	%	SABIC Method
Melt Flow Rate, 266°C/5.0 kgf	11	g/10 min	ASTM D 1238

Density	1.35	g/cm³	ISO 1183
Water Absorption, (23°C/sat)	0.42	%	ISO 62
Moisture Absorption (23°C / 50% RH)	0.14	%	ISO 62
Melt Volume Rate, MVR at 265°C/5.0 kg	10	cm <sup>3</sup> /10 min	ISO 1133

Source GMD, last updated:03/05/2007

## **Processing**

Parameter		
Injection Molding	Value	Unit
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

Source GMD, last updated:03/05/2007

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.

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