

## Xenoy\* Resin XD1647

## Europe-Africa-Middle East: COMMERCIAL

XENOY XD1647 is a semi crystalline, impact modified PBT+PC blend, containing 15% mineral filler. It is especially developed to obtain a reduced coefficient of thermal expansion combined with good chemical resistance. The material can be painted with water based and solvent based paint systems.

### Property

TYPICAL PROPERTIES <sup>(1)</sup>			
MECHANICAL	Value	Unit	Standard
Tensile Stress, yield, 50 mm/min	55	MPa	ISO 527
Tensile Stress, break, 50 mm/min	45	MPa	ISO 527
Tensile Strain, break, 50 mm/min	10	%	ISO 527
Tensile Modulus, 1 mm/min	3500	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	85	MPa	ISO 178
Flexural Modulus, 2 mm/min	3450	MPa	ISO 178
IMPACT	Value	Unit	Standard
Izod Impact, unnotched 80*10*4 +23°C	NB	kJ/m <sup>2</sup>	ISO 180/1U
Izod Impact, unnotched 80*10*4 -30°C	NB	kJ/m <sup>2</sup>	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	12	kJ/m <sup>2</sup>	ISO 180/1A
Izod Impact, notched 80*10*4 0°C	9	kJ/m <sup>2</sup>	ISO 180/1A
Izod Impact, notched 80*10*4 -30°C	8	kJ/m <sup>2</sup>	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	15	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy -30°C, V-notch Edgew 80*10*4 sp=62mm	9	kJ/m <sup>2</sup>	ISO 179/1eA
THERMAL	Value	Unit	Standard
CTE, -30°C to 80°C, flow	6.5E-05	1/°C	ISO 11359-2
Vicat Softening Temp, Rate B/50	125	°C	ISO 306
Vicat Softening Temp, Rate B/120	128	°C	ISO 306
HDT/Be, 0.45MPa Edgew 120*10*4 sp=100mm	109	°C	ISO 75/Be
HDT/Ae, 1.8 MPa Edgew 120*10*4 sp=100mm	90	°C	ISO 75/Ae
PHYSICAL	Value	Unit	Standard
Mold Shrinkage on Tensile Bar, flow (2)	0.6 - 0.8	%	SABIC Method
Density	1.3	g/cm <sup>3</sup>	ISO 1183
Melt Volume Rate, MVR at 250°C/5.0 kg	13	cm <sup>3</sup> /10 min	ISO 1133

Source GMD, last updated:05/17/2001

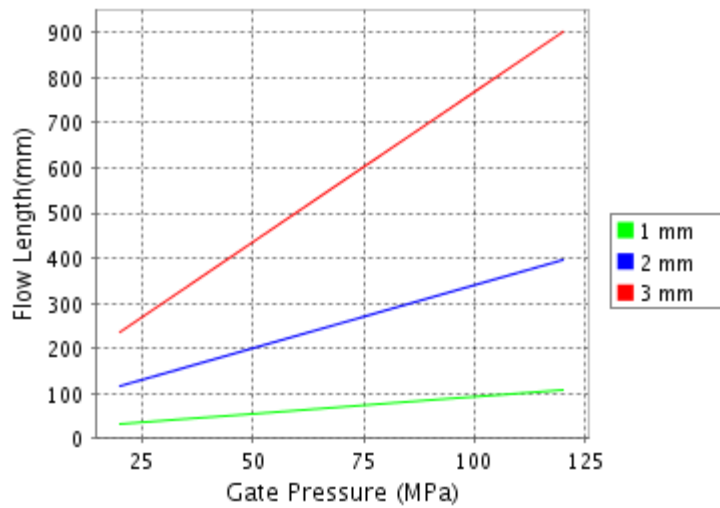
### Processing

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

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**CALCULATED FLOW LENGTH INDICATION**  
**Moldflow® Radial Flow Analysis**  
**Valox® V3001MC**  
**Melt Temperature : 260°C**  
**Mold Temperature : 70°C**



**Note: Technical support is recommended if Gate Pressure is greater than 80 MPa. Contact your local representative.**  
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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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