ESTER INDUSTRIES LTD.

Product Data Sheet
ESTOPLAST XU517BB11
[PA6-UF - Toughened]

Product Description

Polyamide 6 - Unfilled, Impact Modified (Toughened)

Product Applications

Automotive: Bumper Facia Part, Electrical components and connectors

Electrical & Electronic: Lighting, Power connectors,

General

Material Status	• Commercial : Active
Filler/Reinforcement	• Unfilled
Forms	• Pellets
Additive	• Mold Release
Features	• High Impact
Appearance/Color	• Black
Processing Method	• Injection molding

Physical	Typical Value	Unit	Test Method
Specific Gravity	1.09		ASTM D - 792
Water Absorption Saturation, 23°C Equilibrium, 23°C, 50%RH	 5.8 2.1	 % %	ISO 62
Molding Shrinkage	1.4	%	ISO 294-4

Mechanical	Dry	Unit	Test Method
Tensile Stress (Break)	49	MPa	ASTM D-638
Tensile Strain (Break)	10	%	ASTM D-638
Flexural Strength	72	MPa	ASTM D-790
IZOD Impact Strength Notch	130	J/m	ASTM D-256A

Flammability	Dry	Unit	Test Method
Flammability Classification 1.50mm	HB	Rating	UL-94

Electrical	Dry	Unit	Test Method
Dielectric Strength	25	$Kvmm^{-1}$	ASTM D 149

Thermal	Dry	Unit	Test Method
Melting Point	222	^{0}C	ASTM D-3418
Heat Deflection Temperature 1.8 MPa	205	^{0}C	ASTM D-648

Injection Molding – XU520BB01

Drying Conditions

Drying Time(hour)	Temperature	Remarks
3-4	85-90°C	Temperature should not be more than 90°C to avoid discoloration Moisture content after drying should be <0.2% Avoid sudden cooling of dry pellet

Injection Molding Temperatures (^{o}C)				
Mold	Melt	Nozzle	Centre	Feed zone
55 – 80	240 – 265	235 -255	235 -250	230-250

Physical form and storage

ESTOPLAST XU is supplied in pellet form. It should be pre-dried as per the guideline mentioned above prior to molding. Standard packing size is 25kg. In order to prevent moisture pick up and contamination, supplied packaging should be kept closed and undamaged.

Product Safety

ESTOPLAST XU is thermally stable up to 350°C and does not give rise to hazardous material due to degradation or evolution of gases and vapors. ESTOPLAST XU decomposes above 350°C and gives carbon dioxide and water on charring.
For more information on safety, refer individual product MSDS. Available on request.

Note

All information supplied in this publication is based on our current knowledge and experience. The data provided fall within the normal range of product properties and relate only to the specific material designed. The data provided should not be used to establish specification limits or used alone as the basis of design. ESTER assumes no liability and makes no warranties of any kind, expressed or implied, whatsoever in respect of application, processing or use made of aforementioned information or product.