ESTER INDUSTRIES LTD.

Product Data Sheet
ESTOPLAST XU400BB11
[PA6-FR] Compound

Product Description

Polyamide 6 - Flame Retardant, Unfilled,

Product Applications

Automotive: Intake manifold, Electrical components and connectors

Electrical & Electronic: Low voltage switch gear/power distribution, Lighting, Power connectors, MCB,

General

Material Status	• Commercial : Active	
Filler/Reinforcement	• Unfilled ,	
Forms	• Pellets	
Additive	• Mold Release	Flame Retardant
Appearance/Color	• Natural	
Processing Method	• Injection molding	

Physical	Typical Value	Unit	Test Method
Specific Gravity	1.19	-	ASTM D – 792
Water Absorption			
Saturation, 23°C	5.5	%	ISO 62
Equilibrium, 23°C, 50%RH	0.95	%	

Mechanical	Dry	Unit	Test Method
Tensile Stress (Yield)	65	MPa	ASTM D-638
Tensile Strain (Break)	5.0	%	ASTM D-638
Flexural Strength	110	MPa	ASTM D-790
IZOD Impact Strength, 23°C			
Notch	45	J/m	ASTM D-256A

Thermal	Dry	Unit	Test Method
Heat Deflection Temperature			
0.45 MPa Unannealed	185	°C	ASTM D-648
1.8 MPa Unannealed	100	°C	ASTM D-648

Electrical	Dry	Unit	Test Method
Di-electric Strength(2mm)	22	KV/mm	ASTM D 149

Flammability	Dry	Unit	Test Method
Flammability Classification 3.2 mm	 V-0		 UL-94

Injection Molding – XU400BB11

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 (°C)				
Mold	Melt	Nozzle	Centre	Feed zone
55 – 80	240 – 255	240 -255	235 -255	235-245

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

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