

**Product Description**

**Polyamide 66 - Unfilled, Natural, FDA.**

**Product Applications**

Food Contact Applications: Food Processors Parts, Light weight Conveyor (Food Items) Chain links, Cutlery items, etc

**General**

Material Status	<ul style="list-style-type: none"> <li>Commercial : Active</li> </ul>
Filler/Reinforcement	<ul style="list-style-type: none"> <li>No reinforcement</li> </ul>
Forms	<ul style="list-style-type: none"> <li>Pellets</li> </ul>
Additive	<ul style="list-style-type: none"> <li>Mold Release</li> </ul>
RoHS Compliance	<ul style="list-style-type: none"> <li>ROHS compliant</li> <li>FDA Compliance (<i>US FDA 21 CFR 177-1500</i>)</li> <li>EN10</li> </ul>
Features	<ul style="list-style-type: none"> <li>Non FR                      Lubricated</li> </ul>
Appearance/Color	<ul style="list-style-type: none"> <li>Natural</li> </ul>
Processing Method	<ul style="list-style-type: none"> <li>Injection molding</li> </ul>

Physical	Typical Value	Unit	Test Method
Density	1.13	g/cm <sup>3</sup>	ISO 1183
Melt Flow Index (275°C/1.2kgs)	42	Grm/10 min	ISO 1133
Water Absorption Equilibrium, 23°C, 50%RH	2.8	%	ISO 62
Mold Shrinkage Across Flow	1.4 to 1.6	%	ISO 294 - 4
Flow	1.3 to 1.5	%	

Mechanical	Typical Value	Unit	Test Method
Tensile Stress at Yield	82	MPa	ISO 527
Tensile Strain at Break	20	%	ISO 527
Tensile Modulus	2900	MPa	ISO 527
Flexural Strength	120	MPa	ISO 178
IZOD Impact Strength Notch	5.3	KJ/M <sup>2</sup>	ISO 180
Unnotch	NB		

Thermal	Typical Value	Unit	Test Method
Heat Deflection Temperature 1.8 MPa	70	°C	ISO 75

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Flammability	Typical Value	Unit	Test Method
Flammability Classification 0.8 mm	V-2	Rating	UL-94

**Injection Molding – XU6100NN01FD**

**Drying Conditions**

Drying Time(hour)	Temperature	Remarks
3-4	80-90°C	Increase Temperature 10-20 °C or Drying time 1-2 hrs if required. Moisture content after drying should be <0.2% Avoid sudden cooling of dry pellet

**Injection Molding Temperatures (°C)**

Mold	Melt	Nozzle	Centre	Feed zone
60 – 80	275 – 285	275 -285	280 -290	260-270

**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 330°C and does not give rise to hazardous material due to degradation or evolution of gases and vapors. ESTOPLAST XU decomposes above 380°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.