

**Product Description**

Polyamide 6 Unfilled Black

Product Application

Automotive: Radiator End Tanks, Gears, Grab Handle etc.

Electrical & Electronic: Switches, Cable Glands, Circuit Breaker Housings etc.

General

Material Status	Commercial: Active
Filler/Reinforcement	Unfilled
Forms	Pellets
Additive	Mould Release
Appearance/Colour	Black
Processing Method	Injection molding

Physical & Rheological Properties	Typical Value	Unit	Test Method
Melt Flow Index	19-23	G/10min	ASTM-D1238
Density	1.11±-1.15	G/cc	ASTM-D792
Shrinkage	1.2-1.7	%	ASTM-D955
Filler Content	<1	%	ASTM-D5630

Mechanical Properties	Typical Value	Unit	Test Method
Tensile Strength @ Yield	500-600	Kg/cm2	ASTM-D638
Elongation @ Break	5-9	%	ASTM-D638
Flexural Strength	700-900	Kg/cm2	ASTM-D790
Flexural Modulus	2000-3000	Mpa	ASTM-D790
Notch Izod Impact Strength(23°C)	3-7	Kg cm/cm	ASTM -D256

Thermal	Typical Value	Unit	Test Method
Heat Deflection Temperature 0.45Mpa Unannealed 1.8 Mpa	165-185 70-80	°C	ASTM-D648

**Drying Conditions**

General Processing Condition –Injection moulding dry Material Polyamide moisture during temperature should not be more than 90 to 110°C two to three hours for material exposed to the atmosphere. Moisture content after drying should be <0.02% avoid sudden cooling of dry pellet.

Injection molding Temperature(°C)

Feed zone	Transition zone	Metering zone	Nozzle	Mold
190°C - 200°C	200°C - 210°C	210°C - 220°C	220°C - 230°C	55°C - 80°C

Physical form and Packaging/Storage

ENRICH POLYMERS ENAMIDE is supplied in pellet form. It should be pre-dried as per 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.

Material Safety

ENRICH POLYMERS ENAMIDE is thermally stable up to 140°C and does not give rise to hazardous material due to degradation or evolution of gases and vapors. ENRICH POLYMERS ENAMIDE decomposes above 350°C and gives carbon dioxide and water on charring.

For more information on safety, refer individual material 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 material 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. ENRICH POLYMERS 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.