

Product Distribution

Polypropylene homo polymer flame retardant V0 Unfilled

Product Application

PP FR compound use as Electrical & Electronic components, Switch housing, Battery casing

Automotive sector like Fuse box covers, relay housing etc,

General

Material Status	Commercial: Active
Filler/Reinforcement	Unfilled
Forms	Pellets
Additive	Flame Retardant
Appearance/Colour	Natural
Processing Method	Injection molding

Physical & Rheological Properties	Typical Value	Unit	Test Method
Melt Flow Index	13-17	G/10min	ASTM-D1238
Density	0.910-0.930	G/cc	ASTM-D792
Shrinkage	0.05-0.09	%	ASTM-D955
Filler Content	1.5-3	%	ASTM-D5630

Mechanical Properties	Typical Value	Unit	Test Method
Tensile Strength @ Yield	300-360	Kg/cm2	ASTM-D638
Elongation @ Break	>25	%	ASTM-D638
Flexural Strength	300-400	Kg/cm2	ASTM-D790
Flexural Modulus	1300-1500	Mpa	ASTM-D790
Notch Izod Impact Strength	1.5-3.5	Kg cm/cm	ASTM -D256

Thermal	Typical Value	Unit	Test Method
Heat Deflection Temperature 0.455Mpa Unannealed 1.8Mpa Unannealed	70-90	°C	ASTM-D648
Flammability@3.2mm	V0	Rating	UL-94

Drying Conditions

General Processing Condition –Injection molding dry Material PP moisture during temperature should not be more than 70 to 80°C one to two 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
170°C - 180°C	180°C - 190°C	190°C - 200°C	200°C - 210°C	50°C - 60°C

Physical form and Packaging/Storage

ENRICH POLYMERS PP is supplied in pellet form. It should be 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 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 PP decomposes above 220°C and gives unsaturated hydrocarbons and small quantity of aldehydes.

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 material.