Advanced Materials

Euremelt®

Thermoplastics Polyamides for Low Pressure Molding
Euremelt®
Thermoplastic Polyamides for Low Pressure Molding:

Low pressure encapsulation of delicate electronic components is increasingly the manufacturing process of choice, replacing more traditional thermosetting epoxy potting compounds and plastic injection molding of cable connectors, providing superior properties and shorter cycle times.

Typical Potting Process:

- Insert electronics and connectors into preformed plastic casing
- Preheat
- Premix epoxy and curing agent
- Inject into mold
- Vacuum/de-aerate
- Wait for cure
- Test component

Low Pressure Molding with Euremelt®
Advantages and Benefits of Euremelt® Low Pressure Molding Compounds:

- Very short (Between 10 – 60 seconds) cycle time to completion of component
- One stage process: Replaces the housing and potting in one single operation
- Low pressure molding typically 5 – 40 bar
- Wide range of applicability from complete circuit boards to simple connectors
- Low viscous molding materials give excellent flow around components, cavities and connecting cables
- Complete water-tight seal
- Wide range of working temperatures, cold as well as hot
- No damage or distortion of components
- High levels of strain protection (Connectors)
- Low toxicity
- Clear Amber or black colored (Visible or invisible components)
- Manufactured in the EU

Euremelt® products are designed to melt and flow easily around delicate components by careful control of the melt viscosity. They show extremely good adhesion to a wide variety of materials including metals, boards, PUR, PP, PVC, and PA66, in fact almost anything that might be expected in an electronic installation. The high level of adhesion provides a watertight seal and hence high longevity of the encased components. Although molding temperatures are quite high, the cycle time and cooling period is relatively short and no curing time is necessary. The encapsulated components can be tested almost right away after de-molding. All the Euremelt® products are UL94-V0 capable*. (To be certified individually)

Applications:

- Printed-board assembles
- Sensitive electronics
- Sensors
- Automotive connectors
- Industrial multi-wire connectors
- Coils
- Relays
- Micro switches
- Transformers
- Cable bundles
- Electrical wire harness

Euremelt® - The “Green” Alternative:

Euremelt® thermoplastic hotmelt polyamides are produced using a high proportion of renewable natural raw materials (>70%) from a variety of vegetable sources. They are applied by a simple thermal melting process without any further chemical reactions and do not involve any mixing of potentially more toxic components. Already considered polymers, they fall outside the scope of REACH. Euremelt® products contain no critical substances according to RoHS/WEEE/EU-automotive guidelines.
## Euremelt® Core Product Range

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## Euremelt® Product Data:

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* UL94 capable but requires certification for the particular application
Euremelt® Thermoplastics Polyamides for low pressure moulding

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