Introduction of PEI Materials

- I. Main characteristics of PEI:
- 1. The Chinese name of PEI (polyetherimide) is amber transparent solid with good flame retardancy and low smoke, and its combustion grade is UL94-V-0.
- 2. PEI has strong high temperature stability, high temperature resistance, hot deformation temperature up to 220 C, and can be used for a long time at 160 180 C.
- 3. It has good hydrolysis stability, high temperature resistance and steam resistance.

II. Applications:

Because of its excellent comprehensive balance performance, PEI has been effectively applied in the electronics, motor and aviation industries, and used as a metal substitute for traditional products and cultural daily necessities. Using PEI instead of metal to manufacture optical fiber connectors can optimize the component structure, simplify the manufacturing and assembly steps, and maintain a more accurate size. Used in the automotive field, such as high temperature connectors, high power lamps and indicator lights, sensors to control the temperature outside the cabin (air conditioning temperature sensor) and sensors to

control the temperature of air and fuel mixtures (effective combustion temperature sensor). It can also be used as a vacuum pump impeller resistant to high temperature lubricant erosion, a grinding glass joint (bearing interface) of a pickaxe evaporator operating at 180 C, and a mirror of a non-illuminated fog-proof lamp.