

Low Density Epdm Based Thermal Insulation

The technology offered is for a light weight/low density solid rocket motor thermal insulation material based on EPDM rubber. The rubber compound shall be processed in the form of sheets of required thicknesses by calendering or extrusion. The sheets shall be used of insulation laying process following the same processing temperature and conditions as followed during NBR based systems. The material interface properties: rubber-to-metal and rubber-to-propellant match with conventional NBR based systems.

The advantage over the conventional NBR system is its 15% lower density values, resulting in lesser inert mass. Also the thermal insulation capability is 10-15% better than elsewhere similar insulations.

The material also exhibit better aging resistance and low temperature characteristics. Other than in sheet form use, it finds utility as moulded elastomeric flight components like igniter head end insulation, igniter nozzle liners, convergent liners, insulation boot, thermal boot, head end domes etc.

Applications

- Can be used as a thermal insulation barrier layer for various equipments and systems wherever required.