

High-temperature thermal insulation RF and Microwave Transparent Radom Material (AEM-HT-1425)

Product Description:

High-temperature, high performance thermal insulation RF transparent Radom material provides effective thermal management to protect electronic device, circuitry and antenna with High Temperature environment. AEM-HT-1425 are used to protect equipment and people, conserve energy, reduce emissions to deliver a more sustainable operational process in some of the most demanding environments in the world.

AEM-HT-1425 material is RF and microwave transparent so it is us frequently in Radom application and its thermal conductivity is very low ~ 0.25 W/mk so it can withstand or protect from high temperature.

Our material is made with alumina-silica-zirconia and Mullite Composition so its Thermal expiation cofficent is also best it can withstand upto 1430°C (2600°F).

Features:

- Excellent insulating performance upto 1430°C (2600°F).
- Excellent material for Radom application due to low dielectric constant and ultra low loss properties.
- Low heat storage
- Tough, resilient and strong, which resist tearing both before and after heating
- thermal shock Resistance
- Good electromagnetic properties
- No smoke emission during high temperature operation.

Applications

- Power generation plants
- Industrial and Commercial
- Consumer goods
- heater insulation from electronic accessory
- Telecom industry
- Hot work industry

Technical specification

Properties	AEM-HT-1425
➤ Colour	➤ White
➤ Max Temperature, $^{\circ}\text{C}$	➤ 1400
➤ Continuous Use Temperature, $^{\circ}\text{C}$	➤ 1300
➤ Melting Temperature, $^{\circ}\text{C}$	➤ 1700
➤ Density, kg/m ³	➤ 100
➤ Operating Frequency	➤ 9KHz to 10GHz
➤ Dielectric constant	➤ 1.57
➤ Loss tangent	➤ 0.02
➤ Thermal conductivity W/mk	➤ 0.23
➤ Thickness	➤ 5mm/10mm/25mm
➤ Coefficient of Thermal Expansion	➤ $5.4 \times 10^{-6}/^{\circ}\text{C}$

