

GUIDELINES

Thermal Bake Out of ARACON[®] Conductive Fiber & EMI Shielding



The core material used in ARACON is DuPont™ KEVLAR[®] brand aramid fiber. Most fibers pick up or give off ambient atmospheric moisture until they reach an equilibrium moisture content at a given temperature and relative humidity level. The amount of moisture regain is important because the properties of most organic fibers are influenced by the fiber's moisture content. In this respect,

KEVLAR[®] is unique since its tensile properties are virtually unaffected by moisture content.

ARACON conductive fiber and EMI shielding complies with spaceflight low outgassing requirements of less than 1% Recovered Mass Loss (RML) and less than 0.1% Collected Volatile Condensable Materials (CVCM) when tested in accordance with ASTM E-595 and ECSS-Q-ST-70-02C.

For best results, the following guidelines should be followed:

Shipping containers with conductive fiber or EMI shielding should be stored in a suitable warehouse under normal climatic conditions. Recommend a temperature range of +15° C to +40° C and humidity level of 30% to 70% RH be maintained. Extreme temperature and/or humidity levels should be avoided.

Keep shipping containers dry, upright, and minimize handling.

Leave each conductive fiber bobbin or EMI shield in its polyethylene bag with desiccant until it is ready to be used. A partially used bobbin should be placed back in its polyethylene bag with desiccant and put in the original container to avoid lot mix-ups.

Prior to installation, it is recommended that the ARACON be baked at 80° C for 8 hours minimum.