

Flammability Properties of Aircraft Carbon-fiber Structural Composite

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Fire properties of a carbon fiber composite considered for aircraft use have been measured by various means. These include the Cone Calorimeter, TGA/DSC measurements, and flame spread under radiant heating. Properties as a function of heat flux have been determined with minimum heat flux for ignition, flame spread and burning. Thermal properties relevant to flammability, namely conductivity and specific heat have also been measured. These can be used to assess fire scenario hazard levels for the composite.