

Polymer Heats of Gasification

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The amount of heat that is required to gasify unit mass of material is one of the key properties that define its ignition resistance and fire response. Knowledge of this property is necessary to assess a material's fire hazard in a particular fire scenario. Nevertheless, even for the most common polymers the values of this property are not well established. Here we present a methodology for determining the heat of gasification using differential scanning calorimetry and apply this methodology to a set of 10 common plastics and engineering polymers.