



## **ASTM D-3418**

### **Transition temperatures of polymers by DSC**

In polymers, and certain other materials, it is desirable to know transition temperatures, or the temperatures at which thermal transitions occur, such as the glass transition temperature, or the melting temperature, as well as the enthalpies (heat) of these transitions. A differential scanning calorimeter is a device which monitors the heat flow into, or out of, a material as a function of temperature and produces either an exothermic or an endothermic (up or down) peak on a graph (thermogram). The Universal Analysis program provided by TA Instruments calculates, for a given peak, the temperature at which the transition occurred as well as the heat associated with that transition. This information can then be used to determine the suitability of a material to a given application.

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