STORK® Materials Technology

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Ignition Temperature

ASTM D1929 “Determining Ignition Temperature for Plastics”

Flash ignition temperature - when gases emitted from the sample can be ignited.
Self-ignition temperature – when the material combusts

A sample is placed within the furnace, and at a given temperature, a pilot flame is held above the sample. If a gaseous flame is produced, flash temperature has been determined. Temperature is increased 10-15 degrees, and the process is repeated.

For self-ignition, the sample is observed within the oven until reaching a temperature that causes the sample itself to burn. Temperature is incrementally increased as with flash temperature testing.

Flash ignition temperature	Self-ignition temperature
620˚F (327˚C)	820˚F (438˚C)