

local flame temperature (in flame emission and absorption spectrometry), T_1

The effective thermodynamic temperature in the observation space as measured by a specific sensor for a specified element (in K).

The temperature of a flame (or other plasma) is not homogeneous. It is usually lower at the borders of the flame. It is therefore appropriate to speak of an effective temperature which represents an average value of all temperatures throughout the observation space.

The flame temperature depends on several factors such as: kind of plasma, kind of gas or gas mixture and concentration gradient of the thermometric species in the observation space.

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