



Designation: E 1970 – 001

Standard Practice for Statistical Treatment of Thermoanalytical Data¹

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1. Scope

1.1 This practice details the statistical data treatment used in some ~~methods based upon~~ thermal analysis methods.

1.2 The method describes the commonly encountered statistical tools of the mean, standard derivation, relative standard deviation, pooled standard deviation, pooled relative standard deviation and the best fit to a straight line, all calculations encountered in thermal analysis methods.

1.3 Some thermal analysis methods derive the analytical value from the slope or intercept of a best fit straight line assigned to three or more sets of data pairs. Such methods may require an estimation of the precision in the determined slope or intercept. The determination of this precision is not a common statistical tool. This practice details the process for obtaining such information about precision.

1.4 Computer or electronic-based instruments, techniques or data treatment equivalent to this practice may also be used.

NOTE 1—Users of this practice are expressly advised that some such instruments or techniques may not be equivalent. It is the responsibility of the user of this standard to determine the necessary equivalency prior to use.

~~1.5 The values stated in SI~~

~~1.5 SI~~ units are ~~to be regarded as~~ the standard.

1.6 There are no ISO methods equivalent to this practice.

2. Referenced Documents

2.1 *ASTM Standards:*

¹ This practice is under the jurisdiction of ASTM Committee E37 on Thermal Measurements and is the direct responsibility of Subcommittee E37.01 on ~~Thermal Analysis Methods—Test Methods and Recommended Practices~~.

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