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sample

in analytical chemistry

A portion of material selected from a larger quantity of material. The term needs to be qualified, e.g. bulk sample, representative sample, primary sample, bulked sample, test sample. The term 'sample' implies the existence of a sampling error, i.e. the results obtained on the portions taken are only estimates of the concentration of a constituent or the quantity of a property present in the parent material. If there is no or negligible sampling error, the portion removed is a test portion, aliquot or specimen. The term 'specimen' is used to denote a portion taken under conditions such that the sampling variability cannot be assessed (usually because the population is changing), and is assumed, for convenience, to be zero. The manner of selection of the sample should be prescribed in a sampling plan.

Source:

PAC, 1990, *62*, 1193 *(Nomenclature for sampling in analytical chemistry (Recommendations 1990))* on page 1200

PAC, 1989, *61*, 1657 *(Nomenclature for automated and mechanised analysis (Recommendations 1989))* on page 1660

See also:

PAC, 1988, *60*, 1461 *(Nomenclature, symbols, units and their usage in spectrochemical analysis-X. Preparation of materials for analytical atomic spectroscopy and other related techniques (Recommendations 1988))* on page 1465

