

The Difference between CRM and SUS Samples



Why Unit Performance Cannot be Analysed using SUS Samples

Since most analytical instrumentation is comparative, it requires a sample of a known composition for accurate calibration. These samples are called Reference Materials. The reference materials are produced under strict manufacturing procedures and differ from laboratory reagents. The differences are in their certification and traceability of the data provided.

Reference Material (RM) is the generic term for a group of either pure substances or matrix materials which are used for calibration, method validation, the establishment of metrological traceability, method development, and for various quality control purposes such as proficiency testing, charting, etc...

If the reference material fulfils numerous requirements including proven homogeneity and stability; and characterisation of the property values using suitable, well-described and validated methods, this information will be summed up in a certificate, resulting in a **certified reference material (CRM)**.



Certified Reference Material (CRM) is reference material, accompanied by a certificate. This means that one or more of whose property values are certified by a procedure which establishes its traceability to an accurate realization of the unit in which the property values are expressed, and for which each certified value is accompanied by an uncertainty at a stated level of

confidence. The CRMs are certified by a recognized certifying organization using approved certification procedures, as instructed in the most recent ISO Guide 35.

Setting Up Samples (SUS) are materials which have an un-certified analysis and are meant to be used as a guide. These samples are used for day-to-day or shift-to-shift adjustment of the instrument. These adjustments are often called "drift correction", "standardization of the calibration", or "re-standardization".

