

104.3 - Stoichiometry (powder form)

These SRMs are defined as primary, working, and secondary standards in accordance with recommendations of the Analytical Chemistry Section of the International Union of Pure and Applied Chemistry [Ref. Analyst 90, 251 (1965)]. These definitions are as follows:

Primary Standard:

a commercially available substance of purity $100 \pm 0.02\%$ (Purity 99.98 + %).

Working Standard:

a commercially available substance of purity $100 \pm 0.05\%$ (Purity 99.95 + %).

Secondary Standard:

a substance of lower purity which can be standardized against a primary grade standard.

PLEASE NOTE: The tables are presented to facilitate comparisons among a family of materials to help customers select the best SRM for their needs. For specific values and uncertainties, the certificate is the only official source.

SRM	Description	Unit of Issue	Chloride Cl (mass fraction %)	Intended Use	Potassium Chloride KCl (mass fraction %)	Potassium K (mass fraction %)	Stoichiometric Purity (mass fraction %)
17g	Sucrose Optical Rotation	60 g					99.941
84l	Potassium Hydrogen Phthalate	60 g		Acidimetric Standard			99.9934
136f	Potassium Dichromate (Oxidimetric Standard)	60 g		Oxidimetric Standard			99.9954
350c	Benzoic Acid (Acidimetric Standard)	30 g		Acidimetric Standard			99.959
351a	Sodium Carbonate (Acidimetric Standard)	50 g		Acidimetric Standard			99.970
723e	Tris(hydroxymethyl)aminomethane (HOCH ₂) ₃ CNH ₂ Acidimetric Standard	50 g		Acidimetric Standard			99.9796
917d	D-Glucose (Dextrose)	50 g		Purity			99.6
973	Boric Acid (Acidimetric Standard)	100 g		Acidimetric Value			100.009
999c	Potassium Chloride Primary Standard	30 g	47.5519	Primary Standard	99.987	52.443	
8040a	Sodium Oxalate (Reductometric Standard)	60 g		Reductometric Standard			99.975

- Certified values are normal font

- Non-certified or reference values are italicized

- Non-certified values in parentheses are for information only