



## Calibration and Services Refractometer Calibration

### Sucrose Solutions

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Sucrose solutions are an extremely easy to use medium for verifying and calibrating refractometers measuring in the Brix scale, as no special consideration is required when testing instruments at ambient temperature fitted with ATC. Sucrose solutions are typically used in the food, beverage and sugar industry.

Sucrose solutions are manufactured on a %weight/weight basis and are calibrated in accordance with EN ISO/IEC 17025:2005. A number of concentrations are available between 0 and 60 °Brix, all being traceable to NIST and ICUMSA.

Sucrose solutions are supplied in 15ml plastic dropper bottles complete with a Certificate of Calibration but may also be supplied in a larger quantity for high volume users or for customers wishing to verify the performance of density meters operating in the °Brix scale.

The Certificate of Calibration values for sucrose in % weight/weight, °Brix and refractive index as well as giving detail about traceability and uncertainty.

### Sucrose Solutions – Supply Contracts

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As sucrose solutions have a limited shelf life of 6-weeks, they must be purchased at the time of requirement. If a frequent calibration regime is operated, the administration cost of issuing purchase orders every time can be relatively high. Many users therefore choose to take out a **supply contract** on a single order that ensures trouble free regular delivery over a twelve month period.

SS05	5	1.34026
SS075	7.5	1.34401
SS10	10	1.34782
SS112	11.2	1.34968
SS115	11.5	1.35015
SS12	12	1.35093
SS125	12.5	1.35171
SS15	15	1.35568
SS20	20	1.36384
SS25	25	1.37233
SS30	30	1.38115
SS35	35	1.39032
SS40	40	1.39986
SS45	45	1.40978
SS50	50	1.42009
SS55	55	1.43080
SS60	60	1.44193

Uncertainty:  $\pm 0.02$  °Brix

### ***Specification***

Certificate:	(ISO17025)
Uncertainty (k=2)	$\pm 0.02$ °Brix
Shelf Life:	6-weeks
Storage:	Refrigerated at approx 5°C Do not freeze
Traceability:	ICUMSA NIST

5.4.6 Estimation of uncertainty of measurement. All Technical or commercial enquiries relating to sucrose solutions should be addressed to Bellingham + Stanley