ISO Guide 34 Certified Reference Materials: Sucrose in Water Standards



Summary of Features & Benefits:

Commercial Benefits

- Customised pack options available
- Extended shelf life 12 weeks (Manufactured inaccordance with ICUMSA guidelines)
- Ready to Use
- Can be used with any brand of refractometer
- Extensive range (1-60% w/w Sucrose in Water solutions)
- Presented in a convenient high quality dropper bottle

Technical Benefits

- ISO Guide 34 Compliant (INAB Ref:001RM)
- Measurement uncertainty computated on a batch by batch basis under these guidelines
- Consistency of product Independent, Traceable, Certified
- Certificates of Analysis and Safety Data Sheets available
- This Certified Reference Material is intended primarily as either a calibrant or analytical control solution for use in Refractive Index based methods of Brix value determination

Reagecon now manufacture a range of Sucrose in Water solutions in compliance with ISO Guide 34 (INAB Ref:001RM). This is an internationally recognised accreditation for the production of certified reference materials. It delivers the highest level of quality assurance possible, and provides the customer with full confidence that the manufacturer's standards are produced correctly and competently in a sound metrological fashion. ISO Guide 34 accreditation requirements includes production planning, material selection, assignment of certified values, uncertainty, traceability, homogeneity and stability, as well as packaging and documentation. These standards are certified by gravimetric preparation, with an uncertainty of measurement of < 0.15% w/w, and include an equivalent % Brix and refractive index value.

ISO Guide 34 Sucrose in Water Standards (INAB Ref:001RM) -12 Week Shelf Life

Product No.	% Sucrose in Water (w/w) @ 20°C	Nominal Brix %*	Nominal Refractive Index @ 20°C	Pack size
BS05	5% Sucrose	5% Brix	1.340264	15ml
BS07	7% Sucrose	7% Brix	1.343253	15ml
BS10	10% Sucrose	10% Brix	1.347824	15ml
BS112	11.2% Sucrose	11.2% Brix	1.349682	15ml
BS115	11.5% Sucrose	11.5% Brix	1.350149	15ml
BS12	12% Sucrose	12% Brix	1.350930	15ml
BS125	12.5% Sucrose	12.5% Brix	1.351714	15ml
BS15	15% Sucrose	15% Brix	1.355679	15ml
BS20	20% Sucrose	20% Brix	1.363842	15ml
BS25	25% Sucrose	25% Brix	1.372328	15ml
BS30	30% Sucrose	30% Brix	1.381149	15ml
BS35	35% Sucrose	35% Brix	1.390322	15ml
BS40	40% Sucrose	40% Brix	1.399860	15ml
BS45	45% Sucrose	45% Brix	1.409777	15ml
BS50	50% Sucrose	50% Brix	1.420087	15ml
BS55	55% Sucrose	55% Brix	1.430800	15ml
BS60	60% Sucrose	60% Brix	1.441928	15ml

^{*}The nominal Brix and Refractive Index values are taken from the ICUMSA published tables

Brix Standards (Stabilised)



Summary of Features & Benefits:

Commercial Benefits

- Most extensive range available in the market place
- Customised pack options available
- Extended 1 Year shelf life (For users not required to follow ICUMSA Guidelines)
- · Can be used with any brand of refractometer
- Extensive range (0 67.5% Brix)
- · Presented in a convenient high quality dropper bottle
- Available as single bottles or a handy set of 6 bottles
- Ready to Use

Technical Benefits

- Test results accredited to ISO/IEC 17025 for values 5-60% Brix (INAB Ref:264T)
- Uncertainty of measurement ±0.11% for all Brix values @ 20°C
- Consistency of product-Independent, Traceable
 Certified
- Certificates of Analysis and Safety Data Sheets available online

Reagecon manufactures several ranges of Brix/Refractive Index Standards for ease of use when controlling all types of refractometers. All of these standards are manufactured using high purity raw materials. These Product ranges - Product No.'s BS00S to BS67S for single bottles and BS00S6 to BS67S6 for packs of six bottles, contain the same raw materials as the ICUMSA range, but are stabilised to have an extended shelf - life of 1 year. These products represent excellent value for users that are not required to follow ICUMSA Guidelines.

All products are prepared gravimetrically on a weight/weight basis. Both solute (sucrose) and solvent (water) are weighed on a balance calibrated by Reagecon engineers using OIML traceable weights. Reagecon holds ISO/IEC 17025 accreditation for calibration of laboratory balances (INAB Ref:265C). The resulting Balance Certificate of Calibration is issued in accordance with the requirements of ISO/IEC 17025. The Brix value of the standard is verified using a high performance calibrated, temperature controlled refractometer.

The control of this instrument is completed using high purity ISO Guide 34 accredited Brix standards similar in Brix value to the products listed.



Brix Standards - Stabilised - 1 Year Shelf Life

Description	Nominal Refractive Index @ 20°C*	Product No. 15ml	Product No. 6x15ml
Sucrose (Brix) Standard Stabilised 0%	1.332986	BSOOS	BS00S6
Sucrose (Brix) Standard Stabilised 5%	1.340264	BS05S	BS05S6
Sucrose (Brix) Standard Stabilised 7%	1.343253	BS07S	BS07S6
Sucrose (Brix) Standard Stabilised 10%	1.347824	BS10S	BS10S6
Sucrose (Brix) Standard Stabilised 11.2%	1.349682	BS112S	BS112S6
Sucrose (Brix) Standard Stabilised 11.5%	1.350149	BS115S	BS115S6
Sucrose (Brix) Standard Stabilised 12%	1.350930	BS12S	BS12S6
Sucrose (Brix) Standard Stabilised 12.5%	1.351714	BS125S	BS125S6
Sucrose (Brix) Standard Stabilised 14.9%	1.355519	BS149S	BS149S6
Sucrose (Brix) Standard Stabilised 15%	1.355679	BS15S	BS15S6
Sucrose (Brix) Standard Stabilised 19.4%	1.362846	BS194S	BS194S6
Sucrose (Brix) Standard Stabilised 20%	1.363842	BS20S	BS20S6
Sucrose (Brix) Standard Stabilised 23.8%	1.370261	BS238S	BS238S6
Sucrose (Brix) Standard Stabilised 25%	1.372328	BS25S	BS25S6
Sucrose (Brix) Standard Stabilised 30%	1.381149	BS30S	BS30S6
Sucrose (Brix) Standard Stabilised 35%	1.390322	BS35S	BS35S6
Sucrose (Brix) Standard Stabilised 40%	1.399860	BS40S	BS40S6
Sucrose (Brix) Standard Stabilised 45%	1.409777	BS45S	BS45S6
Sucrose (Brix) Standard Stabilised 50%	1.420087	BS50S	BS50S6
Sucrose (Brix) Standard Stabilised 55%	1.430800	BS55S	BS55S6
Sucrose (Brix) Standard Stabilised 60%	1.441928	BS60S	BS60S6
Sucrose (Brix) Standard Stabilised 67.5%	1.459290	BS67S	BS67S6

^{*}The nominal Refractive Index value is taken from the ICUMSA published tables for all product numbers except BS67S and BS67S6 (Brix Value 67.5%) which is a measured value.