# Refractive Index Standards



Reagecon

Product No: Lot No: Expiry Date:

RI0144 RI4413F1 28/06/15

### Summary of Features & Benefits:

#### **Commercial Benefits**

- Both sucrose and solvent based standards available
- Most extensive range in the marketplace
- Customised pack options available
- Shelf life of 1 2 years
- Can be used with any brand of refractometer
- Extensive range (1.33299-1.65808 ,D)
- 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 in the range of 1.33310 to 1.65812 (INAB Ref:264T)
- Uncertainty of measurement up to 0.00014 D units
- Consistency of product-Independent, Traceable, Certified
- Certificates of Analysis and Safety Data Sheets available online

Product No.'s RIBS07S to RIBS60S have identical components and shelf life (1 Year) to the stabilised Brix Standards already described in the previous section. However, the certified values are expressed in Refractive Index (R.I) units  $_{n}$ D. All these 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 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 R.I. 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.

| Reg 1 Facts<br>Accelerate<br>Estimation<br>ESTIMATION IN SCORE REG IN LIGHT  | Control of the second s | INSTRUCTIONS FOR USE:<br>• Frior to use, the conterns of the decoper boths should be brought to reem temperature and<br>mixed theoregibly by investing to ensure a homogeneous mix.<br>• Replace cap immediately after use.<br>• Replace cap immediately after use.<br>• Freder turns the acred at 2-FC when not in use.<br>• DO NOT FREEZE |
|--|--|---|
| PRODUCT:   | Refractive Index Stabilised Standard @ 20°C - 1.35015nD  | This Product is Stabilised by the addition of 0.01% of preservative.  |
| PRODUCT NO:  | RIB\$115S  |   |
| LOT NO:  | RIB\$11516D1   |   |
| DATE OF TEST:  | 04 <sup>th</sup> April 2016  |   |
| EXPIRY DATE:   | 28 <sup>th</sup> April 2017  |   |
| SPECIFICATION:   | 1.34984 - 1.35046nD @ 20°C   |   |
| MEAN:  | 1.35044nD @ 20°C   |   |
| TEST METHOD:   |  |   |
| manufacture. The Refracti<br>performance calibrated, to<br>This test method provides<br>This certificate relates sol<br>has been calculated not to<br>coverage factor k=2.   | wa determined by studychi of a sample of this lot taken at time of<br>two block values of the studymath and studymath sing a high<br>impenative controlled refractometer according to TPRLA 0.<br>I tracoability to high parity ISO Guide 34 Cettified References Materials.<br>We to be for studymath and solve. The uncertainty of measurement<br>exceed 40.00014aD (00155) @20°C at 95% confidence level, i.e.  |   |
| ACCREDITATION:   |  |   |
| Reageon Diagnotics Lul, is accredited by the firsh National Accreditation Board, under scope<br>2047, for the test medba, TPRL 00, used to generate the above result. This accreditation is<br>intended only to certify that Reageon has the Quality Management Systems in place to ensure that<br>each individual trensult generated using TPRLA 01 is technically valid and is supported by<br>appropriate uncertainty measurements. |  | Approved By: QC Technician<br>QUITEN MCDONSOIN  |
|  |  | Date: 04 <sup>th</sup> April 2016<br>This certificate must not be reproduced except in full   |
|  | Page 1 of 2  | - Page 2  |
|  |  |   |

## Refractive Index Standards - Stabilised Sucrose - 1 Year Shelf Life

| Description (20°C)      | Nominal Refractive<br>Index @ 20°C* | Product No.<br>15ml | Product No.<br>6x15ml |
|-------------------------|-------------------------------------|---------------------|-----------------------|
| Refractive Index @ 20°C | 1.33299                             | RIBSOOS             | RIBS00S6              |
| Refractive Index @ 20°C | 1.34026                             | RIBS05S             | RIBS05S6              |
| Refractive Index @ 20°C | 1.34325                             | RIBS07S             | RIBS07S6              |
| Refractive Index @ 20°C | 1.34782                             | RIBS10S             | RIBS10S6              |
| Refractive Index @ 20°C | 1.34968                             | RIBS112S            | RIBS112S6             |
| Refractive Index @ 20°C | 1.35015                             | RIBS115S            | RIBS115S6             |
| Refractive Index @ 20°C | 1.35093                             | RIBS12S             | RIBS12S6              |
| Refractive Index @ 20°C | 1.35171                             | RIBS125S            | RIBS125S6             |
| Refractive Index @ 20°C | 1.35568                             | RIBS15S             | RIBS15S6              |
| Refractive Index @ 20°C | 1.36384                             | RIBS20S             | RIBS20S6              |
| Refractive Index @ 20°C | 1.37233                             | RIBS25S             | RIBS25S6              |
| Refractive Index @ 20°C | 1.38115                             | RIBS30S             | RIBS30S6              |
| Refractive Index @ 20°C | 1.39032                             | RIBS35S             | RIBS35S6              |
| Refractive Index @ 20°C | 1.39986                             | RIBS40S             | RIBS40S6              |
| Refractive Index @ 20°C | 1.40978                             | RIBS45S             | RIBS45S6              |
| Refractive Index @ 20°C | 1.42009                             | RIBS50S             | RIBS50S6              |
| Refractive Index @ 20°C | 1.4308                              | RIBS55S             | RIBS5556              |
| Refractive Index @ 20°C | 1.44193                             | RIBS60S             | RIBS60S6              |
| Refractive Index @ 20°C | 1.46546                             | RIBS70S             | RIBS70S6              |

\* The nominal Refractive Index value is taken from the ICUMSA published tables

### Solvent Based Refractive Index Standards - 2 Year Shelf Life

| Description (20°C)      | Nominal Refractive<br>Index @ 20°C* | Product No.<br>15ml | Product No.<br>6x15ml |
|-------------------------|-------------------------------------|---------------------|-----------------------|
| Refractive Index @ 20°C | 1.38779                             | RI0138              | RI01386               |
| Refractive Index @ 20°C | 1.40485                             | RI0140              | RI01406               |
| Refractive Index @ 20°C | 1.42345                             | RI0142              | RI01426               |
| Refractive Index @ 20°C | 1.44468                             | RI0144              | RI01446               |
| Refractive Index @ 20°C | 1.46768                             | RI0146              | RI01466               |
| Refractive Index @ 20°C | 1.49672                             | RI0149              | RI01496               |
| Refractive Index @ 20°C | 1.50044                             | RI0150              | RI01506               |
| Refractive Index @ 20°C | 1.51726                             | RI0151              | RI01516               |
| Refractive Index @ 20°C | 1.5366                              | RI0154              | RI01546               |
| Refractive Index @ 20°C | 1.65808                             | RI0165              | RI01656               |

\* The nominal Refractive Index value is taken from the ICUMSA published tables

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