

### **Summary of Features & Benefits:**

#### **Commercial Benefits**

- Extensive range (500ppb to 20,000ppm /0.5mg/l to 20,000mg/l)
- Presented in single use glass vials
- Extended shelf life
- Ready to Use
- Offered as single vials or convenient kit format

#### **Technical Benefits**

- In accordance with USP <643> and <1051> guidelines
- Consistency of product Independent, Traceable, Certified
- Certificates of Analysis and Safety Data Sheets available online
- · Extremely high specification and purity
- Manufactured in a cleanroom environment
- Vials are manufactured, cleaned and leached specifically for low level TOC standards
- Products manufactured from Ultra-Pure Water, produced by a special proprietary process
- ISO/IEC 17025 Accreditation 500µg/L to 50mg/l (INAB Ref:264T)

Reagecon manufactures a range of Total Organic Carbon (TOC) and Total Inorganic Carbon (TIC) Standards for ease of use when calibrating all types of TOC analysers, irrespective of brand. All of our TOC standards are manufactured using high purity raw materials in accordance with USP <1051> and <643> guidelines. These products are prepared gravimetrically on a weight/weight basis. Both solute (salts) 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 TOC / TIC of the standard is verified using a high performance calibrated TOC analyser. The calibration of this instrument involves the use of high purity ISO Guide 34 accredited TOC standards similar in TOC value to the products listed in the following tables.





## **TOC/TIC Standards**

Product No.	Description	Pack Size
RTOCW	USP Reagent Water Rw	35ml
RTOCRs	USP Standard Sucrose Solution Rs (0.5mg/L C)	35ml
RTOCRss	USP System Suitability Solution 1, 4-Benzoquinone (0.5mg/L C)	35ml
RTOCK08	TOC Standard 0.5mg/L C as Potassium Hydrogen Phthalate	35ml
RTOCK09	TOC Standard 1.0mg/L C as Potassium Hydrogen Phthalate	35ml
RTOCK10	TOC Standard 1.5mg/L C as Potassium Hydrogen Phthalate	35ml
RTOCK10a	TOC Standard 1.5mg/L C as Potassium Hydrogen Phthalate acidified with Hydrochloric Acid	35ml
RTOCK11	TOC Standard 10mg/L C as Potassium Hydrogen Phthalate	35ml
RTOCK12	TOC Standard 25mg/L C as Potassium Hydrogen Phthalate	35ml
RTOCK30	TOC Standard 30 mg/L C as Potassium Hydrogen Phthalate	35ml
RTOCK13	TOC Standard 50mg/L C as Potassium Hydrogen Phthalate	35ml
RTOCK14	TOC Standard 5mg/L C as Potassium Hydrogen Phthalate	35ml
RTOCK15	TOC Standard 2.5mg/L C as Potassium Hydrogen Phthalate	35ml
RTOCK16	TOC Standard 4mg/L C as Potassium Hydrogen Phthalate	35ml
RTOCK17	TOC Standard 100mg/L C as Potassium Hydrogen Phthalate	35ml
RTOC125B	TOC Standard 125ppm C as 1,4-Benzoquinone	35ml
RTOC125S	TOC Standard 125ppm C as Sucrose	35ml
RTOCK18	TOC Standard 1,000mg/L C as Potassium Hydrogen Phthalate	35ml
RTOC1000K	TOC Standard 1,000ppm C as Potassium Hydrogen Phthalate	35ml
RTOCK19	TOC Standard 5,000mg/L C as Potassium Hydrogen Phthalate	35ml
RTOCK20	TOC Standard 20,000mg/L C as Potassium Hydrogen Phthalate	35ml
RTOCK01	TOC Standard 50ppb C as Potassium Hydrogen Phthalate	35ml
RTOC200	TOC Standard 200ppb C as Sucrose	35ml
RTOC800	TOC Standard 800ppb C as Sucrose	35ml
RTICN01	TIC Standard 0.5mg/L as Sodium Carbonate	35ml
RTICN02	TIC Standard 1.0mg/L as Sodium Carbonate	35ml
RTICN03	TIC Standard 1.5mg/L as Sodium Carbonate	35ml
RTICN04	TIC Standard 2mg/L as Sodium Carbonate	35ml
RTICN09	TIC Standard 4mg/L as Sodium Carbonate	35ml
RTICN05	TIC Standard 5mg/L as Sodium Carbonate	35ml
RTICN06	TIC Standard 10mg/L as Sodium Carbonate	35ml
RTICN07	TIC Standard 25mg/L as Sodium Carbonate	35ml
RTICN08	TIC Standard 50mg/L as Sodium Carbonate	35ml
RTIC1000	TIC Standard 1000mg/L as Sodium Carbonate	35ml
RTOCS01	TOC Standard 0.5mg/L C as Sucrose	35ml
RTOCS02	TOC Standard 1.0mg/L C as Sucrose	35ml
RTOCS03	TOC Standard 2mg/L C as Sucrose	35ml
RTOCS04	TOC Standard 5mg/L C as Sucrose	35ml
RTOCS05	TOC Standard 10mg/L C as Sucrose	35ml
RTOCS06	TOC Standard 25mg/L C as Sucrose	35ml
RTOCS07	TOC Standard 50mg/L C as Sucrose	35ml
RTOCS08	TOC Standard 0.25mg/L C as Sucrose	35ml
RTOCS09	TOC Standard 0.75mg/L C as Sucrose	35ml
RTOCS10	TOC Standard 4mg/L C as Sucrose	35ml
RTOCS11	TOC Standard 500mg/L C as Sucrose	35ml

# **TOC/TIC Standards**

Product No.	Description	Pack Size
RTOCN01	TOC Standard 50mg/L C as Nicotinamide	35ml
RTOCN02	TOC Standard 0.5mg/L C as Nicotinamide	35ml
RTOCM01	TOC Standard 0.5mg/L C as Methanol	35ml
RTOCWa	USP Reagent Water Rw acidified with HCl	35ml
RTOCRsa	USP Standard Sucrose Solution Rs (0.5mg/L C) acidified with HCl	35ml
RTOCRssa	USP System Suitability Solution 1,4-Benzoquinone (0.5mg/L C) acidified with HCl	35ml
RTOCUSP1	USP System Suitability Set consisting of 1 x 40ml vial of Reagent Water (RTOCW), Standard Solution (RTOCRs) and Suitability Solution (RTOCRss)	3 x 35ml
RTOCUSP2	2 x USP System Suitability Set consisting of 1 x 40ml vial of Reagent Water (RTOCW), Standard Solution (RTOCRs) and Suitability Solution (RTOCRss). Delivered at six month intervals	3 x 35ml
RTOCUSP4	4 x USP System Suitability Sets, consisting of: 1 x 40ml vial of Reagent Water (RTOCW), Standard Solution (RTOCRs) and Suitability Solution (RTOCRss). Delivered at three month intervals	3 x 35ml
RTOCUSP12	12 x (USP System Suitability Set consisting of 1 x 40ml vial of Reagent Water (RTOCW), Standard Solution (RTOCRs) and Suitability Solution (RTOCRss). Delivered at monthly intervals	3 x 35ml
RTOCUSP52	52 x (USP System Suitability Set consisting of 1 x 40ml vial of Reagent Water (RTOCW), Standard Solution (RTOCRs) and Suitability Solution (RTOCRss). Delivered at 2 weekly intervals	3 x 35ml
RTOCUSP260	260 x USP System Suitability Set consisting of 1 x 40ml vial of Reagent Water (RTOCW), Standard Solution (RTOCRs) and Suitability Solution (RTOCRss). Delivered at 2 weekly intervals	3 x 35ml
RC120001	Carbon Calibration Set 1-50mg/L C consisting of 1 x 40ml vial each of calibration blank (RTOCW), TOC Standards 1(RTOCK09), 5 (RTOCK14), 10 (RTOCK11), 25 (RTOCK12), 50 (RTOCK13) mg/L C as Potassium Hydrogen Phthalate, TIC Standards 1mg/L (RTICN02), 5mg/L (RTICN05), 10mg/L (RTICN06), 25mg/L (RTICN07), 50mg/L (RTICN08) C as Sodium Carbonate	11 x 35ml
RC120002	1mg C/L Carbon Standard Set consisting of 1 x 40ml vial each of calibration blank (ROTCW), 1mg/L (RTOCK09) C TOC as Potassium Hydrogen Phthalate and 1 mg/L (RTICN02) C TIC as Sodium Carbonate	3 x 35ml
RC120003	1mg C/L Carbon Verification Set consisting of 1 x 40ml vial each of calibration blank (ROTCW), 1mg/L (RTOCS02) C TOC as Sucrose and 1 mg/L (RTICN02) C TIC as Sodium Carbonate	3 x 35ml
RC120004	1mg C/L Carbon Standard Set and Verification Set consisting of 1 x RC120002 and 1 x RC120003	6 x 35ml
RC120005	5mg C/L Carbon Standard Set consisting of 1 x 40ml vial each of calibration blank (RTOCW), 5mg/L (RTOCK14) C TOC as Potassium Hydrogen Phthalate and 5 mg/L (RTCIN05) C TIC as Sodium Carbonate	3 x 35ml
RC120006	5mg C/L Carbon Verification Set consisting of 1 x 40ml vial each of calibration blank (RTOCW), 5mg/L (RTOCS04) TOC C as Sucrose and 5 mg/L (RTICN05) TIC C as Sodium Carbonate	3 x 35ml
RC120007	5mg C/L Carbon Standard and Verification Set consisting of 1 x RC120005 and 1 x RC120006	6 x 35ml



Product No.	Description	Pack Size
RC120008	0.5mg/L Carbon Verification Set consisting of 1 x 40ml vial each of calibration blank (RTOCW), 0.5mg/L (RTOCS01) TOC C as Sucrose and 0.5mg/L (RTICN01) TIC C as Sodium Carbonate	3 x 35ml
RC120009	1mg/L Carbon Standard and 0.5mg/L Carbon Verification Set Consisting of 1 x RC120002 and 1 x RC120008	6 x 35ml
RC120010	Validation Set Accuracy Precision (0.5mg), consisting of 1 x Reagent water (RTOCW) and 1 x 0.5mg/L C as sucrose (RTOCS01) in 40ml Vials	2 x 35ml
RC120011	Validation Set Linearity, consisting of 1x Reagent water blank (RTOCW) and 1 each of 0.25mg/L (RTOCS08), 0.5mg/L (RTOCS01), 0.75mg /L (RTOCS09), C as Sucrose in 40ml vials	4 x 35ml
RC120012	Validation Set Specificity, consisting of 1 x Reagent water (RTOCW), 1 x 0.5mg/L (RTOCM01) C as Methanol, 1 x 0.5mg/L (RTOCN02) C as Nicotinamide and 1 x 0.5mg/L (RTOCK08) C as Potassium Hydrogen Phthalate in 40ml vials	4 x 35ml
RC120013	Validation Set Robustness Standards, consisting of 1 x Reagent water (RTOCWa), 1 x Standard Solution (RTOCRsa), 1 x System suitability solution (RTOCRssa) in 40ml vials. All standards in the set acidified	3 x 35ml
RC120014	Validation Set Complete , consisting of 1xRC120010, 1xRC120011, RC120012 and RC120013	13 x 35ml
RC120015	10mg C/L Carbon Standard Set consisting of 1 x 40ml vial each of calibration blank (RTOCW), 10mg/L (RTOCK11) TOC C as Potassium Hydrogen Phthalate and 10mg/L (RTICN06) TIC C as Sodium Carbonate	3 x 35ml
RC120016	Multipoint calibration set for Sievers 5310C, consisting of 1 x calibration blank (RTOCW), 1 each of 0.25mg/L (RTOCK15), 1mg/L (RTOCK09), 5mg/L (RTOCK14), 25mg/L (RTOCK12), 50mg/L (RTOCK13) C as Potassium Hydrogen Phthalate TOC standards and 1 each of 1mg/L (RTICN02), 5mg/L (RTICN05), 10mg/L (RTICN06), 25mg/L (RTICN07), 50mg/L (RTICN08) C as Sodium Carbonate TIC standards	11 x 35ml
RC120017	2mg C/L Carbon Verification Set consisting of 1 x 40ml vial each of calibration blank (RTOCW), 2mg/L (RTOCS03) TOC C as Sucrose and 2mg/L (RTICN04) TIC C as Sodium Carbonate	3 x 35ml
RC120018	10mg C/L Carbon Verification Set consisting of 1 x 40ml vial each of calibration blank (RTOCW), 10mg/L (RTOCS05) TOC C as Sucrose and 10mg/L (RTICN06) TIC C as Sodium Carbonate	3 x 35ml
RC120019	3 point Carbon Verification Set consisting of 1 x 40ml Vial each of 1mg/L (RTOCK09), 5mg/L (RTOCK14), 10mg/L (RTOCK11) C as Potassium Hydrogen Phthalate	3 x 35ml





