

Reference Material for Nutrients in Seawater (RMNS)

This certified reference material (CRM) is produced by KANSO TECHNOS CO., LTD. (KANSO) on the basis of quality control system under ISO 17034 (JIS Q 17034). KANSO is accredited under the Accreditation System of National Institute of Technology and Evaluation (ASNITE) as a CRM producer since 2011. (Accreditation No.: ASNITE 0052 RMP)



1 All Nutrients are contained in one bottle

2 From low level to high level are available

Source material	autoclaved natural seawater
Intended use	seawater nutrients (nitrate, nitrite, phosphate and silicate) analysis
Sample volume	more than 80mL
Product size	100 mL polypropylene bottle
Packaging	vacuum-sealed in aluminum film bag
Determined by	continuous flow analysis (CFA) method

Example certified values

2026/3/10

KANSO CRM-RMNS Lots

Lot.No.	Production date	Expiration date	Last date of availability*1	Property Value					Salinity [psu]
				Nitrate	Nitrite	Silicate	Phosphate	<i>Ammonium</i> *5	
				[μmol/kg]					
CQ	2021.5.20	2028.5.19	2027.5.20	0.06 (0.03) 0.005	0.07*4 (0.07) 0.0006	2.20 (0.07) 0.011	0.030 (0.009) 0.001	<i>1.76 (0.07)</i> <i>0.009</i>	34.703 0.0001
CT	2024.3.12	2031.3.11	2030.3.12	40.1 (0.4) 0.018	0.35*4 (0.07) 0.0009	85.3 (0.9) 0.036	2.13 (0.03) 0.003		34.536 0.0001
CU	2024.4.26	2031.4.25*4	2030.4.26	3.06 (0.05) 0.007	0.04*4 (0.04) 0.0011	7.77 (0.09) 0.011	0.262 (0.011) 0.0012	<i>1.02 (0.04)</i> <i>0.006</i>	34.742 0.0001
CW	2024.5.8	2031.5.7	2030.5.8	21.2 (0.2) 0.017	0.24*4 (0.07) 0.0008	41.6 (0.5) 0.027	1.45 (0.03) 0.0018		34.426 0.0006
CX	2024.6.11	2031.6.10	2030.6.11	39.4 (0.4) 0.018	0.024 *3 0.0007	121.4 (1.3) 0.061	2.77 (0.04) 0.005		34.361 0.0001

Expanded uncertainty with a coverage factor of 2 ($\mu k=2$) in parentheses.
 Between-bottle standard deviation (sd) on the second row.



[KANSO Si CRM] Silicon (Si) Standard Solution is also available

Certified value	1000 mg/kg: Si	Sample volume	About 100 mL
Intended use	For Continuous Flow Analysis (CFA) method		
Additional info.	Density: 1.0031 g/cm ³ (at 20 ° C) / pH 12		