
Technical Note

No. TN2

An evaluation of DCL CO₂-L3K (Cat. No. 299-30/17/50/80) Reagent on the DAX

DCL CO₂-L3K reagent was evaluated on the DAX at an external test site. This evaluation included testing linearity, within-run precision, run-to-run precision, interferences, LLD, as well as a correlation to Sigma's Infinity CO₂. The performance data is outlined below:

Linearity (Acceptance Criteria ± 8%)

This procedure is linear to 50 mmol/L (50 mEq/L)

Within-Run Precision (Acceptance Criteria ± 8%)

Mean	n	SD	CV (%)
12.4	10	0.5	4.2
23.8	10	0.6	2.7

Run-to-Run Precision (Acceptance Criteria ± 8%)

Mean	n	SD	CV (%)
12.2	15	0.6	4.6
22.9	15	0.8	3.5

LLD / Sensitivity

The minimal detectable value, as determined by assaying replicate water samples, is 1.0 mmol/L (1.0 mEq/L)

Interference Study (Acceptance Criteria ± 10% in a normal serum sample)

Lipemia: No significant interference noted to 1000 mg/dL (11.29 mmol/L) intralipid (3000 mg/dL (33.87 mmol/L) Triglyceride)

Bilirubin: No significant interference noted to 40 mg/dL (684 µmol/L) bilirubin

Hemoglobin: No significant interference noted to 1000 mg/dL (155 µmol/L) hemoglobin

Correlation DCL CO₂-L3K versus Sigma Infinity CO₂

DCL = 0.979 (Sigma) - 0.3 mmol/L (mEq/L)

"R" = 0.9774

n = 40

For more information, contact DCL Technical Services at 800-565-0265.

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