LOW-LEVEL CRMs

Synthetic drinking and wastewater matrices with low concentrations of analytes for testing water supply, drinking water, ground water, water pollution, or wastewater.

Save time diluting your standards or spending numerous hours producing them yourself with our low-level Certified Reference Materials (CRMs).

Our line of low-level CRMs are optimal for:

- Method development and validation
- System checks
- Evaluating limits of quantitation
- Minimum detection limit studies
- Detection verification
- Many other uses

Contents

CRM: A reference material characterized by a metrologically valid procedure for one or more specified properties, accompanied by a reference material certificate that provides the value of the specified property, its associated uncertainty, and a statement of metrological traceability.

A complete listing of ERA's CRMs can be found on our Scope of Accreditation for general requirements for competence of reference material producers available at www.eraqc.com/AboutERA/Accreditations.

RM: A material, sufficiently homogeneous and stable with respect to one or more specified properties, which has been established to be fit for its intended use in a measurement process.

Inorganics

Chlorine

CRM
Cat. #1358

One 2 mL flame-sealed ampule spiking concentrate and one 24 mL screw-cap vial matrix concentrate yields up to 2 liters of sample.

Total chlorine	75–500 µg/L
Free chlorine	75–500 µg/L

Color

CRM
Cat. #1353

One 125 mL whole-volume bottle sample is ready to be analyzed.

Color	5–25 pc units

Common Inorganics

CRM
Cat. #1249

One liter poly bottle whole-volume sample is ready to be analyzed.

Alkalinity	20–120 mg/L
Calcium	2–50 mg/L
Chloride	25–500 mg/L
Conductivity	80–1,000 µmhos/cm
Fluoride	0.25–5 mg/L
Magnesium	1–25 mg/L
pH	5–10 units
Potassium	2–50 mg/L
Sodium	5–100 mg/L
Sulfate	2–50 mg/L
Total dissolved solids	60–750 mg/L
Total hardness	9–250 mg/L

Common Inorganics in Hard Water

CRM
Cat. #1346

One liter poly bottle whole-volume sample is ready to be analyzed.

Alkalinity	20–100 mg/L
Calcium	10–100 mg/L
Chloride	20–250 mg/L
Conductivity	130–1400 µmhos/cm
Fluoride	0.2–2 mg/L
Magnesium	2–10 mg/L
pH	5–10 units
Potassium	2–25 mg/L
Sodium	20–250 mg/L
Sulfate	20–250 mg/L
Total dissolved solids	100–1000 mg/L
Total hardness	30–300 mg/L

Common Inorganics in Soft Water

CRM
Cat. #1347

A 1 liter poly bottle whole-volume sample is ready to be analyzed.

Alkalinity	20–100 mg/L
Calcium	2–50 mg/L
Chloride	5–50 mg/L
Conductivity	25–300 µmhos/cm
Fluoride	0.2–2 mg/L
Magnesium	0.5–5 mg/L
pH	5–10 units
Potassium	1–10 mg/L
Sodium	5–50 mg/L
Sulfate	5–50 mg/L
Total dissolved solids	20–200 mg/L
Total hardness	5–75 mg/L

Cyanide

CRM
Cat. #1345

One 15 mL screw-cap vial yields up to 2 liters of sample.

Free cyanide	5–100 µg/L
Total cyanide	5–100 µg/L

Demand

CRM
Cat. #1354

One 15 mL screw-cap vial yields up to 2 liters of sample.

5-day BOD	2–25 mg/L
COD	2–25 mg/L
DOC	1–10 mg/L
TOC	1–10 mg/L

CRM
Cat. #1242

One 15 mL screw-cap vial spiking concentrate yields up to 2 liters of sample.

5-day BOD	5–75 mg/L
COD	10–150 mg/L
DOC	2–40 mg/L
TOC	2–40 mg/L

Stanley Dunlavy
EH & S Engineer

Inorganics (continued)

High Solids

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One 24 mL screw-cap vial with a powder concentrate yields 1 liter of solution.

Total dissolved solids	100–1000 mg/L
Total suspended solids (TSS)	5–50 mg/L

Solids Concentrate

CRM
Cat. #1243

One 24 mL screw-cap vial concentrate yields up to 1 liter of sample.

Total dissolved solids	10–250 mg/L
Total suspended solids (TSS)	5–50 mg/L

Metals

Hexavalent Chromium

CRM
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One 15 mL screw-cap vial spiking concentrate and one 24 mL screw-cap vial matrix concentrate yields up to 2 liters of sample.

Hexavalent chromium	5–100 µg/L

Mercury

CRM
Cat. #1341

One 15 mL screw-cap vial spiking concentrate and one 24 mL screw-cap vial matrix concentrate yields up to 2 liters of sample.

Mercury, total	0.1 to 1.2 µg/L

Metals (continued)

Metals

CRM
Cat. #1244

One 15 mL screw-cap vial spiking concentrate and one 24 mL screw-cap vial matrix concentrate yields up to 2 liters of sample.

Aluminum	200–4000 µg/L
Antimony	95–900 µg/L
Arsenic	70–900 µg/L
Barium	100–2500 µg/L
Beryllium	8–900 µg/L
Boron	800–2000 µg/L
Cadmium	8–750 µg/L
Chromium, total	17–1000 µg/L
Cobalt	28–1000 µg/L
Copper	40–900 µg/L
Iron	200–4000 µg/L
Lead	70–3000 µg/L
Manganese	70–4000 µg/L
Molybdenum	60–600 µg/L
Nickel	80–3000 µg/L
Selenium	90–2000 µg/L
Silver	26–600 µg/L
Strontium	30–300 µg/L
Thallium	60–900 µg/L
Vanadium	55–2000 µg/L
Zinc	100–2000 µg/L

The Industry Standard for over 40 years

CRM – Certified Reference Material

Nutrients

Complex Nutrients in Hard Water

CRM
Cat. #1241

One 15 mL screw-cap vial spiking concentrate yields up to 2 liters of sample.

Total Kjeldahl nitrogen	0.5–5 mg/L
Total nitrogen	1–20 mg/L
Total phosphorus	0.5–5 mg/L

Simple Nutrients

CRM
Cat. #1240

Two 15 mL screw-cap vials yields up to 2 liters of sample.

Ammonia (N)	1–20 mg/L
Nitrate (NO_3)	0.5–10 mg/L
Nitrite (NO_2)	0.5–5 mg/L
Total oxidised nitrogen	1–15 mg/L
Soluble reactive phosphorus (P)	0.5–5 mg/L

Simple Nutrients in Hard Water

CRM
Cat. #1348

Two 15 mL screw-cap vial spiking concentrates and one 24 mL screw-cap vial matrix concentrate yields up to 2 liters of sample.

Ammonium (NH_4)	0.1–1 mg/L
Nitrate (NO_3)	3–60 mg/L
Nitrite (NO_2)	0.1–1 mg/L
Soluble reactive phosphorus (P)	0.5–5 mg/L
Total oxidised nitrogen (TON)	3–60 mg/L

Simple Nutrients in Soft Water

CRM
Cat. #1349

Two 15 mL screw-cap vial spiking concentrates and one 24 mL screw-cap vial matrix concentrate yields up to 2 liters of sample.

Ammonium (NH_4)	0.1–1 mg/L
Nitrate (NO_3)	3–60 mg/L
Nitrite (NO_2)	0.1–1 mg/L
Soluble reactive phosphorus (P)	0.5–5 mg/L
Total oxidised nitrogen (TON)	3–60 mg/L

Organics

Volatiles

CRM
Cat. #1370

One 2 mL flame-sealed ampule spiking concentrate and one 24 mL screw-cap vial matrix concentrate yields up to 2 liters of sample to be analyzed for the compounds listed below at 0.1–50 µg/L.

Benzene	Ethylbenzene	o-Xylene
Carbon tetrachloride	Methylene chloride	m-Xylene
Chlorobenzene	Styrene	p-Xylene
1,2-Dichlorobenzene	Tetrachloroethene	m+p-Xylene
1,4-Dichlorobenzene	Toluene	Xylenes, total
1,2-Dichloroethane	1,2,4-Trichlorobenzene	
1,1-Dichloroethylene	1,1,1-Trichloroethane	
cis-1,2-Dichloroethylene	1,1,2-Trichloroethane	
trans-1,2-Dichloroethylene	Trichloroethene	
1,2-Dichloropropane	Vinyl chloride	

Jennifer Watson
Customer Service Representative

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