Australian Government
Department of Industry, Science and Resources

National Measurement Institute

Matrix reference material

Catalogue

June 2024

Quality matrix reference materials for identification and calibration are essential to making accurate chemical measurements in testing.

Category	Description	Identifier	Packaging	Australian price	International Price
Matrix Certified Reference Materials	Ethanol in Water Ethanol 0.61, 1.23 and 4.9 g/kg (corresponding to calibrators to breath alcohol concentrations of 0.005, 0.01 and 0.4 g/210 L of expired air)	#	500 g Bottle	110	#
Matrix Certified Reference Materials	Trace Elements in Freeze-Dried Prawn (dry mass basis) As 4.06 ± 0.15 mg/kg Co 0.0932 ± 0.0068 mg/kg Cr 1.06 ± 0.18 mg/kg Cu 17.1 ± 1.2 mg/kg Fe 116 ± 10 mg/kg Hg 0.1483 ± 0.0051 mg/kg Mn 5.55 ± 0.33 mg/kg Ni 0.515 ± 0.070 mg/kg Se 2.78 ± 0.11 mg/kg V 0.281 ± 0.025 mg/kg Zn 74.0 ± 4.8 mg/kg	MX009	10 g Bottle	290	407
Matrix Certified Reference Materials	Nitrofuran Marker Residues in Freeze-Dried Prawn 3-amino-2-oxazolidinone 137.5 ± 8.5 ng/g	MX012A	1.2 g Bottle	303	424
Matrix Certified Reference Materials	Nitrofuran Marker Residues in Freeze-Dried Prawn 3-amino-2-oxazolidinone 30.2 ± 1.8 ng/g semicarbazide 70.3 ± 3.1 µg/g	MX012B	1.2 g Bottle	303	424
Matrix Certified Reference Materials	Folic acid in Wheat Flour folic acid 2.28 ± 0.13 mg/kg	MX013	20 g Jar	242	339
Matrix Certified Reference Materials	Trace Elements in Sea Water As 2.96 ± 0.26 µg/kg Cd 1.318 ± 0.034 µg/kg Co 2.864 ± 0.068 µg/kg Cr 2.613 ± 0.075 µg/kg Cu 2.90 ± 0.25 µg/kg Fe 21.70 ± 0.32 µg/kg Hg 0.433 ± 0.010 µg/kg Mn 1.48 ± 0.16 µg/kg Ni 3.66 ± 0.10 µg/kg Pb 2.467 ± 0.065 µg/kg Se 3.06 ± 0.26 µg/kg V 4.76 ± 0.12 µg/kg	MX014	120 mL Bottle	290	407

Category	Description	Identifier	Packaging	Australian price	International Price
Matrix Certified Reference Materials	Hydrocarbon-Contaminated Soil Equivalent Carbon Number >C_{10} – C_{16} 0.90 ± 0.15 g/kg Equivalent Carbon Number >C_{16} – C_{34} 7.2 ± 1.1 g/kg Equivalent Carbon Number >C_{34} – C_{40} 1.1 ± 0.2 g/kg Total Recoverable Hydtrocarbons >C_{16} – C_{40} 9.2 ± 1.4 g/kg	MX015	Jar 50 g	215	330
Matrix Reference Materials	PFAS in Soil PFBA 1.70 ± 0.30 µg/kg PFPeA 4.36 ± 0.80 µg/kg PFHxA 17.1 ± 2.5 µg/kg PFHpA 3.47 ± 0.45 µg/kg PFOA 73.1 ± 8.2 µg/kg PFNA 0.253 ± 0.052 µg/kg PFBS 2.18 ± 0.33 µg/kg PFHxS 53.7 ± 7.2 µg/kg PFHxS-Total 61.2 ± 8.2 µg/kg PFOS 910 ± 140 µg/kg PFOS-Total 950 ± 140 µg/kg MeFOSA 2.22 ± 0.37 µg/kg EtFOSE 4.9 ± 1.2 µg/kg 6:2 FTS 5.38 ± 0.65 µg/kg All analytes are linear only unless otherwise specified. Total – Sum of linear and branched isomers.	MX019	Tube 20 g	264	370
Matrix Reference Materials	Pesticides in Tomato Puree Bifenthrin 0.289 ± 0.021 mg/kg Buprofezin 0.182 ± 0.017 mg/kg Chlorpyrifos 0.781 ± 0.035 mg/kg Endosulfan sulfate 0.615 ± 0.052 mg/kg Imidacloprid 0.351 ± 0.029 mg/kg Pirimicarb 0.670 ± 0.052 mg/kg	MX030	Bottle 100 g	215	330

[#] contact proficiency@measurement.gov.au for current batch identifiers and international prices.

NMI Reference Materials

Reference Materials (RMs) produced by NMI are NATA accredited to ISO 17034:2016(E) and prepared in accordance with our accreditation.

RMs have demonstrated homogeneity and stability and are supplied with:

- Product information sheet
- Safety Data Sheet (SDS)

NMI Certified Reference Materials

Certified Reference Materials (CRMs) produced by NMI have established metrological traceability to the SI unit for mass (kg).

CRMs have certified purity values, stated as a mass fraction with associated uncertainty and are supplied with:

- Certificate of Analysis (CoA)

Candidate materials

All care is taken in the storage and handling of these materials however they are not independently certified by NMI.

Individual unit issue size varies depending on the amount available and the difficulty of obtaining the replacement compound. They can be provided with the analytical information available.

GST charges

(Australian customers only)

The prices quoted are EXCLUSIVE of Goods and Services Tax (GST). The current GST rate is 10%. Upon delivery of the requested reference materials NMI will issue valid tax invoices and, if required, adjustment notes as per the requirements of the GST legislation.

Delivery Fee

Delivery and handling fees apply for all orders and vary with destination. Please check the applicable rates when ordering.

For further information

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www.measurement.gov.au/chemref

NMI reference materials available globally through our international partner:

LGC Standards

Web: www.lgcstandards.com

NATA logo notice: Accredited for compliance with ISO 17034. Accreditation No. 198 / Corporate Site No. 14214.