Schedule of Accreditation

issued by

United Kingdom Accreditation Service

2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

4005

Accredited to ISO 17034:2016

LGC Limited

Issue No: 017 **Issue date:** 19 August 2020

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Reference material production at the above address

DETAIL OF ACCREDITATION

Matrix / Artefact	Property Value(s) / Identity / Characterisation Range	Characterisation Procedure / Technique	Type* (CRM / RM)
Special Alloys			
Auto Catalysts	Pt - trace to % levels Pd - trace to % levels Rh - trace to % levels	Measurement by a single, primary, definitive method at LGC (ICP-IDMS)	CRM and RM
Pure Organic Compounds			
Organic Chemicals	Purity (% m/m)	Measurement by two or more independent reference methods at LGC. Methods selected from DSC, HPLC, GC-FID, GC-MS, Titration, plus Karl Fischer (volumetric and Coulometric) and/or TGA Or Measurement by one reference method at LGC (DSC, HPLC, GC-FID, GC-MS, Titration), with supporting evidence obtained using qNMR, plus Karl Fischer (volumetric and coulometric) and/or TGA. This approach to be used where the organic compound is amenable to only one of the listed reference methods.	CRM and RM
	Melting Point (30-300 °C)	Measurement by a single, primary, definitive method at an NMI laboratory (Contact Thermometry)	CRM

Matrix / Artefact	Property Value(s) / Identity / Characterisation Range	Characterisation Procedure / Technique	Type* (CRM / RM)
Pure Organic Compounds (cont'd)			
Calibration Solutions	Polychlorinated Biphenyls	Measurement by a single, primary, definitive method at LGC (GC-IDMS) And/or Measurement by a network of qualified laboratories using a variety of methods of demonstrable accuracy	CRM and RM
Glycine and Glycine in solution	Absolute Isoptope Ratio ^{12}C and ^{13}C	Measurement by a single, primary, definitive method at LGC (Multi-collector –ICP-MS)	CRM and RM
Foodstuffs			
Alcoholic Beverages (wines, spirits, lagers)	Alcoholic Strength (%ABV)	Measurement by a single, primary, definitive method at LGC laboratory (pycnometry) and: Measurement by a network of qualified laboratories using a variety of methods of demonstrable accuracy	CRM and RM
	Congeners	Measurement by a network of qualified laboratories using a variety of methods of demonstrable accuracy	CRM and RM
Basic and Composite Foods Including: Meats and Meat Products Dairy Products Bread and Bakery Products Cereals and Cereal Products Confectionery Soft Drinks Dried Food Products Fruit and Vegetable Products Dry vegetation Animal Feeds Food Supplements	Elements, Selenium (Content and Speciation), Proximates, Additives, Contaminants and Preservatives including: Sugars Sulfur Dioxide Artificial Colours Antioxidants Sweeteners Degrees Brix Refractive Index	Measurement by a single, primary, definitive method at LGC laboratory (ICP-IDMS) – Elements, Selenium (Content and Speciation), Water by coulometric oven Karl-Fischer analysis only And/or Measurement by a network of qualified laboratories using a variety of methods of demonstratable accuracy	CRM and RM

Matrix / Artefact	Property Value(s) / Identity / Characterisation Range	Characterisation Procedure / Technique	Type* (CRM / RM)
Foodstuffs (cont'd)			
Basic and Composite Foods Including: Meats and Meat Products Dairy Products Bread and Bakery Products Cereals and Cereal Products Confectionery Soft Drinks Dried Food Products Fruit and Vegetable Products Dry vegetation Animal Feeds Food Supplements	Allergen food protein as listed in Annex II of the EU Food Information for Consumers Regulation No.1169/2011	Gravimetric preparation of matrix material and characterisation of nitrogen content of allergen food ingredients by DUMAS combustion followed by thermal conductivity detection	RM
Meats	Species Identification	Measurement in a single laboratory, using a variety of methods of demonstratable accuracy (DNA, Elisa and reputable source)	RM
Petroleum Products			
Diesel and Gasoline	Sulfur (Trace to % Levels)	Measurement by a single, primary, definitive method at LGC (ICP-IDMS)	CRM and RM
Soils, Sludges and Sediments			
Soils, Sludges, Sediments	Organics and inorganics (Trace to % Levels)	Measurement by a single, primary, definitive method at LGC (ICP-IDMS, GC IDMS, HPLC-IDMS) And/or Measurement by a network of qualified laboratories using a variety of methods of demonstrable accuracy	CRM and RM

Matrix / Artefact	Property Value(s) / Identity / Characterisation Range	Characterisation Procedure / Technique	Type* (CRM / RM)
Soils, Sludges and Sediments (cont'd)			
Gypsum material	Inorganics (Trace to % Levels)	Measurement by a single, primary, definitive method at LGC (ICP-IDMS) And/or Measurement by a network of qualified laboratories using a variety of methods of demonstrable accuracy	CRM and RM
Ashes			
Fuel Ash	Inorganics (Trace to % Levels)	Measurement by a single, primary, definitive method at LGC (ICP-IDMS) And/or Measurement by a network of qualified laboratories using a variety of methods of demonstrable accuracy	CRM and RM
Waters			
Drinking Water, River Water, Estuarine Water, Rain Water, Leachates	Anions and Elements (Trace to % Levels)	Measurement by a single, primary, definitive method at LGC (ICP-IDMS) And/or Measurement by a network of qualified laboratories using a variety of methods of demonstrable accuracy	CRM and RM
Clinical Laboratory Materials			
Whole Blood and Serum	Organics and Elements, Selenium (Content and Speciation)	Measurement by a single, primary, definitive method at LGC (ICP-IDMS, GC-IDMS and LC-IDMS) And/or Measurement by a network of qualified laboratories using a variety of methods of demonstrable accuracy	CRM and RM

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Reference material production performed at main address only

Matrix / Artefact	Property Value(s) / Identity / Characterisation Range	Characterisation Procedure / Technique	Type* (CRM / RM)
Ethanol Reference Standards			
Forensic Ethanol Solutions	Ethanol (mg/100ml)	Measurement by a single, primary, definitive method at LGC (Potassium Dichromate Titration)	CRM
Ethanol/Water Reference Spirits	Density (kg/m^3)	Measurement by a single, primary, definitive method at LGC (Pycnometry)	CRM
	Alcoholic Strength (%ABV)	Taken to be the % alcohol by volume corresponding to that density from the Official Laboratory Alcohol Table (RDC80/267/04), Issued under the authority of the UK HM Customs & Excise	CRM
Optical Properties			
Small Organic Molecules or Inorganic Compounds in Solution	Wavelength and Absorbance	Measurement by a single, primary, definitive method in a single laboratory	CRM and RM
END			

***Type**
CRM = Certified Reference Material(s)
RM = Reference Material(s)
Refer to ISO 17034 for full definitions