23･10･19-NITE-AC-001
2024-02-29

Certificate of Accreditation

International Accreditation Japan (IAJapan) hereby accredits the following conformity assessment body as a Reference Material Producer of ASNITE accreditation program.

Accreditation Identification: ASNITE 0044 RMP

Name of Conformity Assessment Body: Tokyo Plant, FUJIFILM Wako Pure Chemical Corporation

Name of Legal Entity: FUJIFILM Wako Pure Chemical Corporation

Location of Conformity Assessment Body: 1633 Oazamatoba, Kawagoe-shi, Saitama, 350-1101 JAPAN

Scope of Accreditation: as the following pages

Accreditation Requirement: ISO 17034:2016*

* The relevant accreditation requirements described in the Accreditation Scheme Document for ASNITE-R (General) are also applied.

Effective Date of Accreditation: 2023-03-04

Expiry Date of Accreditation: 2027-03-03

Date of Initial Accreditation: 2010-09-03

K. Saito

SAITO Kazunori
Chief Executive, International Accreditation Japan (IAJapan)
National Institute of Technology and Evaluation

- International Accreditation Japan (IAJapan) is an RMP accreditation body which has signed MRAs of ILAC (International Laboratory Accreditation Cooperation) and APAC (Asia Pacific Accreditation Cooperation).
- MRA requirements are, in addition to relevant international standards and guides, requirements for participation in proficiency testing programs, surveillance and reassessment, and the policy on the traceability of measurement for MRA purpose.
- This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system in accordance with the recognized International Standard ISO 17034:2016.
- The latest accreditation information is publicly available on IAJapan Website as an accreditation certificate.

Category: Chemical Reference Materials
Type: Certified Reference Material
Property Characterized: Concentration
The Approach Used to Assign a Property Value:
(*1) Measurement by One or More Method(s) in a Single Laboratory (ISO 17034:2016 7.12.3 NOTE 1 b), d))
(*2) Characterization Based on Mass or Volume of Ingredients Used in the Preparation of the Reference Material (ISO 17034:2016 7.12.3 NOTE 1 e))

Sub-category	Property	Range of Property Value	Range of Expanded Uncertainty (Level of Confidence Approximately 95 %) (k=2)	Characterization Technique	Effective Date of Accreditation
Inorganic Reference Material High Purity Inorganic Material (Reference Materials for Volumetric Analysis) (*1)	Amidosulfuric Acid (Purity)	≧ 99.90 %	≧ 0.03 %	Potentiometric titrimetry	2023.3.4
	Potassium Hydrogen Phthalate (Purity)	99.95 % to 100.05 %	≧ 0.03 %	Potentiometric titrimetry	
	Sodium Oxalate (Purity)	≧ 99.95 %	≧ 0.05 %	Potentiometric titrimetry	
	Sodium Carbonate (Purity)	≧ 99.95 %	≧ 0.03 %	Potentiometric titrimetry	
	Potassium Dichromate (Purity)	≧ 99.98 %	≧ 0.03 %	Potentiometric titrimetry	
	Potassium Iodate (Purity)	≧ 99.95 %	≧ 0.04 %	Potentiometric titrimetry	
	Sodium Chloride (Purity)	≧ 99.95 %	≧ 0.06 %	Potentiometric titrimetry	
	Sodium Fluoride (Purity)	≧ 99.90 %	≧ 0.04 %	Gravimetric analysis	
Inorganic Reference Material High Purity Inorganic Material (Flexible Scope of Accreditation) (*1)	Metallic Standard Solution (Single Component)	100 mg/kg～ 1000 mg/kg	–	Chelatometric Titrimetry Comparison with NIST(*1)-CRM.	
				ICP-OES(*2) Comparison with NIST(*1)-CRM.	2024.2.29

Note: Information on reference materials producible under the flexible scope of accreditation is available on the RMP's website (https://www.fujifilm.com/ffwk/ja/about/sustainability/quality/temp).
*1 National Institute of Standard and Technology
*2 Inductively coupled plasma optical emission spectrometry

Sub-category	Property	Range of Property Value	Range of Expanded Uncertainty (Level of Confidence Approximately 95 %) (k=2)	Characterization Technique	Effective Date of Accreditation
Organic Reference Material Pure Organic Compound (*1)	1,4-BTMSB-d4 (Purity)	≧ 99.0 %	≧ 0.5 %	Quantitative NMR	2023.3.4
	DSS-d6 (Purity)	91.9 % to 93.2 %	≧ 0.3 %	Quantitative NMR	
	Anilofos (Purity)	≧ 98.0 %	≧ 0.3 %	Quantitative NMR	
	DEP (Purity)	≧ 99.0 %	≧ 0.3 %	Quantitative NMR	
	DCMU (Purity)	≧ 98.0 %	≧ 0.3 %	Quantitative NMR	
	Diazinon (Purity)	≧ 99.0 %	≧ 0.3 %	Quantitative NMR	
	Diflubenzuron (Purity)	≧ 99.0 %	≧ 0.4 %	Quantitative NMR	
	Flutolanil (Purity)	≧ 98.0 %	≧ 0.9 %	Quantitative NMR	
	Malathon (Purity)	≧ 98.0 %	≧ 0.3 %	Quantitative NMR	
	MCP (Purity)	≧ 98.0 %	≧ 0.3 %	Quantitative NMR	
	Propyzamide (Purity)	≧ 98.0 %	≧ 0.4 %	Quantitative NMR	
	Pyributicarb (Purity)	≧ 99.0 %	≧ 0.3 %	Quantitative NMR	
	Silafluofen (Purity)	≧ 99.0 %	≧ 0.4 %	Quantitative NMR	
	Tiadinil (Purity)	≧ 98.0 %	≧ 0.3 %	Quantitative NMR and Freezing point depression method	
	Chlorfenapyr (Purity)	≧ 99.0 %	≧ 0.3 %	Quantitative NMR	
	CNP-amino (Purity)	≧ 97.0 %	≧ 0.5 %	Quantitative NMR	
	CAT (Purity)	≧ 99.0 %	≧ 0.4 %	Quantitative NMR	
	Clothianidin (Purity)	≧ 99.0 %	≧ 0.4 %	Quantitative NMR	

Sub-category	Property	Range of Property Value	Range of Expanded Uncertainty (Level of Confidence Approximately 95 %) (k=2)	Characterization Technique	Effective Date of Accreditation
Organic Reference Material Pure Organic Compound (*1)	Fludioxonil (Purity)	≧ 99.0 %	≧ 0.3 %	Quantitative NMR and Freezing point depression method	2023.3.4
	Glyphosate (Purity)	≧ 96.0 %	≧ 0.6 %	Quantitative NMR	
	Isoprothiolane (Purity)	≧ 99.0 %	≧ 0.4 %	Quantitative NMR	
	Indanofan (Purity)	≧ 99.0 %	≧ 0.3 %	Quantitative NMR	
	Linuron (Purity)	≧ 99.0 %	≧ 0.4 %	Quantitative NMR and Freezing point depression method	
	Methomyl (Purity)	≧ 98.0 %	≧ 0.3 %	Quantitative NMR	
	Thiamethoxam (Purity)	≧ 99.0 %	≧ 0.3 %	Quantitative NMR	
	Thiacloprid (Purity)	≧ 97.0 %	≧ 0.3 %	Quantitative NMR	
	Tetraconazole (Purity)	≧ 98.0 %	≧ 0.3 %	Quantitative NMR	
	Tricyclazole (Purity)	≧ 99.0 %	≧ 0.3 %	Quantitative NMR and Freezing point depression method	
	Methyl Dimethyldithiocarbamate (Purity)	≧ 98.0 %	≧ 0.3 %	Quantitative NMR	
	MIPC (Purity)	≧ 99.0 %	≧ 0.3 %	Quantitative NMR	
	Dimethyl Sulfone (Purity)	≧ 99.0 %	≧ 0.5 %	Quantitative NMR	
	Maleic Acid (Purity)	≧ 99.0 %	≧ 0.4 %	Quantitative NMR	

Sub-category	Property	Range of Property Value	Range of Expanded Uncertainty (Level of Confidence Approximately 95 %) (k=2)	Characterization Technique	Effective Date of Accreditation
Organic Reference Material Pure Organic Compound (*2)	16 amino acid mixture standard solution				2023.3.4
	L-Aspartic Acid	0.1800 μmol/mL～0.2200 μmol/mL	0.0026 μmol/mL	Gravimetric	
	L-Glutamic Acid	0.900 μmol/mL～1.100 μmol/mL	0.023 μmol/mL	Gravimetric	
	Sarcosine	0.1800 μmol/mL～0.2200 μmol/mL	0.0032 μmol/mL	Gravimetric	
	L-Citrulline	0.900 μmol/mL～1.100 μmol/mL	0.005 μmol/mL	Gravimetric	
	DL-2-Aminobutyric Acid	0.4500 μmol/mL～0.5500 μmol/mL	0.0031 μmol/mL	Gravimetric	
	L-Cystine	0.900 μmol/mL～1.100 μmol/mL	0.005 μmol/mL	Gravimetric	
	L-Methionine	0.900 μmol/mL～1.100 μmol/mL	0.005 μmol/mL	Gravimetric	
	DL-3-Aminoisobutyric Acid	0.1800 μmol/mL～0.2200 μmol/mL	0.0015 μmol/mL	Gravimetric	
	4-Aminobutyric Acid	0.1800 μmol/mL～0.2200 μmol/mL	0.0016 μmol/mL	Gravimetric	
	2-Aminoethanol	0.1800 μmol/mL～0.2200 μmol/mL	0.0019 μmol/mL	Gravimetric	
	5-Hydroxy-DL-Lysine	0.1800 μmol/mL～0.2200 μmol/mL	0.0013 μmol/mL	Gravimetric	
	1-Methyl-L-Histidine	0.1800 μmol/mL～0.2200 μmol/mL	0.0043 μmol/mL	Gravimetric	
	3-Methyl-L-Histidine	0.1800 μmol/mL～0.2200 μmol/mL	0.0019 μmol/mL	Gravimetric	
	L-Anserine	0.1800 μmol/mL～0.2200 μmol/mL	0.0040 μmol/mL	Gravimetric	
	L-Carnosine	0.1800 μmol/mL～0.2200 μmol/mL	0.0037 μmol/mL	Gravimetric	
	L-Hydroxyproline	0.1800 μmol/mL～0.2200 μmol/mL	0.0030 μmol/mL	Gravimetric	

Sub-category	Property	Range of Property Value	Range of Expanded Uncertainty (Level of Confidence Approximately 95 %) (k=2)	Characterization Technique	Effective Date of Accreditation
Organic Reference Material Pure Organic Compound (*2)	15 amino acid mixture standard solution				2023.3.4
	Taurine	4.500 μmol/mL～5.500 μmol/mL	0.044 μmol/mL	Gravimetric	
	L-Threonine	4.500 μmol/mL～5.500 μmol/mL	0.035 μmol/mL	Gravimetric	
	L-Serine	4.500 μmol/mL～5.500 μmol/mL	0.035 μmol/mL	Gravimetric	
	Glycine	9.00 μmol/mL～11.00 μmol/mL	0.07 μmol/mL	Gravimetric	
	L-Alanine	9.00 μmol/mL～11.00 μmol/mL	0.08 μmol/mL	Gravimetric	
	L-Valine	9.00 μmol/mL～11.00 μmol/mL	0.08 μmol/mL	Gravimetric	
	L-Isoleucine	4.500 μmol/mL～5.500 μmol/mL	0.036 μmol/mL	Gravimetric	
	L-Leucine	4.500 μmol/mL～5.500 μmol/mL	0.036 μmol/mL	Gravimetric	
	L-Tyrosine	4.500 μmol/mL～5.500 μmol/mL	0.038 μmol/mL	Gravimetric	
	L-Phenylalanine	4.500 μmol/mL～5.500 μmol/mL	0.035 μmol/mL	Gravimetric	
	L-Ornithine	2.250 μmol/mL～2.750 μmol/mL	0.023 μmol/mL	Gravimetric	
	L-Lysine	4.500 μmol/mL～5.500 μmol/mL	0.037 μmol/mL	Gravimetric	
	L-Histidine	4.500 μmol/mL～5.500 μmol/mL	0.033 μmol/mL	Gravimetric	
	L-Arginine	2.250 μmol/mL～2.750 μmol/mL	0.020 μmol/mL	Gravimetric	
	L-Proline	4.500 μmol/mL～5.500 μmol/mL	0.040 μmol/mL	Gravimetric	

Sub-category	Property	Range of Property Value	Range of Expanded Uncertainty (Level of Confidence Approximately 95 %) (k=2)	Characterization Technique	Effective Date of Accreditation
Organic Reference Material Pure Organic Compound (*2)	18 amino acid mixture standard solution				2023.3.4
	L-Aspartic Acid	0.2250 μmol/mL～0.2750 μmol/mL	0.0011 μmol/mL	Gravimetric	
	L-Threonine	0.2250 μmol/mL～0.2750 μmol/mL	0.0017 μmol/mL	Gravimetric	
	L-Serine	0.2250 μmol/mL～0.2750 μmol/mL	0.0012 μmol/mL	Gravimetric	
	L-Glutamic Acid	0.2250 μmol/mL～0.2750 μmol/mL	0.0048 μmol/mL	Gravimetric	
	Glycine	0.2250 μmol/mL～0.2750 μmol/mL	0.0017 μmol/mL	Gravimetric	
	L-Alanine	0.2250 μmol/mL～0.2750 μmol/mL	0.0014 μmol/mL	Gravimetric	
	L-Valine	0.2250 μmol/mL～0.2750 μmol/mL	0.0017 μmol/mL	Gravimetric	
	L-Cystine	0.1125 μmol/mL～0.1375 μmol/mL	0.0007 μmol/mL	Gravimetric	
	L-Methionine	0.2250 μmol/mL～0.2750 μmol/mL	0.0018 μmol/mL	Gravimetric	
	L-Isoleucine	0.2250 μmol/mL～0.2750 μmol/mL	0.0020 μmol/mL	Gravimetric	
	L-Leucine	0.2250 μmol/mL～0.2750 μmol/mL	0.0018 μmol/mL	Gravimetric	
	L-Tyrosine	0.2250 μmol/mL～0.2750 μmol/mL	0.0014 μmol/mL	Gravimetric	
	L-Phenylalanine	0.2250 μmol/mL～0.2750 μmol/mL	0.0020 μmol/mL	Gravimetric	
	Ammonium Chloride	0.2250 μmol/mL～0.2750 μmol/mL	0.0019 μmol/mL	Gravimetric	
	L-Lysine	0.2250 μmol/mL～0.2750 μmol/mL	0.0017 μmol/mL	Gravimetric	
	L-Histidine	0.2250 μmol/mL～0.2750 μmol/mL	0.0016 μmol/mL	Gravimetric	
	L-Arginine	0.2250 μmol/mL～0.2750 μmol/mL	0.0017 μmol/mL	Gravimetric	
	L-Proline	0.2250 μmol/mL～0.2750 μmol/mL	0.0019 μmol/mL	Gravimetric	

Sub-category	Property	Range of Property Value	Range of Expanded Uncertainty (Level of Confidence Approximately 95 %) (k=2)	Characterization Technique	Effective Date of Accreditation
Organic Reference Material Pure Organic Compound (*2)	12 amino acid mixture standard solution				2023.3.4
	4-Aminobutyric Acid	0.2250 μmol/mL～0.2750 μmol/mL	0.0014 μmol/mL	Gravimetric	
	2-Aminoethanol	0.2250 μmol/mL～0.2750 μmol/mL	0.0017 μmol/mL	Gravimetric	
	Ammonium Chloride	0.2250 μmol/mL～0.2750 μmol/mL	0.0039 μmol/mL	Gravimetric	
	5-Hydroxy-DL-lysine	0.2250 μmol/mL～0.2750 μmol/mL	0.0014 μmol/mL	Gravimetric	
	L-Ornithine	0.2250 μmol/mL～0.2750 μmol/mL	0.0013 μmol/mL	Gravimetric	
	L-Lysine	0.2250 μmol/mL～0.2750 μmol/mL	0.0012 μmol/mL	Gravimetric	
	1-Methyl-L-histidine	0.2250 μmol/mL～0.2750 μmol/mL	0.0018 μmol/mL	Gravimetric	
	L-Histidine	0.2250 μmol/mL～0.2750 μmol/mL	0.0017 μmol/mL	Gravimetric	
	3-Methyl-L-histidine	0.2250 μmol/mL～0.2750 μmol/mL	0.0019 μmol/mL	Gravimetric	
	L-Anserine	0.2250 μmol/mL～0.2750 μmol/mL	0.0024 μmol/mL	Gravimetric	
	L-Carnosine	0.2250 μmol/mL～0.2750 μmol/mL	0.0014 μmol/mL	Gravimetric	
	L-Arginine	0.2250 μmol/mL～0.2750 μmol/mL	0.0014 μmol/mL	Gravimetric	

Sub-category	Property	Range of Property Value	Range of Expanded Uncertainty (Level of Confidence Approximately 95 %) (k=2)	Characterization Technique	Effective Date of Accreditation
Organic Reference Material Pure Organic Compound (*2)	25 amino acid mixture standard solution				2023.3.4
	O-Phospho-L-serine	0.1125 μmol/mL～0.1375 μmol/mL	0.0014 μmol/mL	Gravimetric	
	Taurine	0.1125 μmol/mL～0.1375 μmol/mL	0.0012 μmol/mL	Gravimetric	
	O-Phosphorylethanolamine	0.1125 μmol/mL～0.1375 μmol/mL	0.0013 μmol/mL	Gravimetric	
	Urea	4.500 μmol/mL～5.500 μmol/mL	0.044 μmol/mL	Gravimetric	
	L-Aspartic Acid	0.2250 μmol/mL～0.2750 μmol/mL	0.0019 μmol/mL	Gravimetric	
	L-Threonine	0.2250 μmol/mL～0.2750 μmol/mL	0.0019 μmol/mL	Gravimetric	
	L-Serine	0.2250 μmol/mL～0.2750 μmol/mL	0.0013 μmol/mL	Gravimetric	
	L-Glutamic Acid	0.2250 μmol/mL～0.2750 μmol/mL	0.0054 μmol/mL	Gravimetric	
	Sarcosine	0.5625 μmol/mL～0.6875 μmol/mL	0.0075 μmol/mL	Gravimetric	
	Glycine	0.2250 μmol/mL～0.2750 μmol/mL	0.0016 μmol/mL	Gravimetric	
	L-Alanine	0.2250 μmol/mL～0.2750 μmol/mL	0.0017 μmol/mL	Gravimetric	
	L-Citrulline	0.2250 μmol/mL～0.2750 μmol/mL	0.0016 μmol/mL	Gravimetric	
	DL-2-Aminoisobutyric Acid	0.1125 μmol/mL～0.1375 μmol/mL	0.0009 μmol/mL	Gravimetric	
	L-Valine	0.2250 μmol/mL～0.2750 μmol/mL	0.0014 μmol/mL	Gravimetric	
	L-Cystine	0.1125 μmol/mL～0.1375 μmol/mL	0.0009 μmol/mL	Gravimetric	
	L-Methionine	0.2250 μmol/mL～0.2750 μmol/mL	0.0021 μmol/mL	Gravimetric	
	L-Cystathionine	0.1125 μmol/mL～0.1375 μmol/mL	0.0007 μmol/mL	Gravimetric	
	L-Isoleucine	0.2250 μmol/mL～0.2750 μmol/mL	0.0017 μmol/mL	Gravimetric	
	L-Leucine	0.2250 μmol/mL～0.2750 μmol/mL	0.0015 μmol/mL	Gravimetric	
	L-Tyrosine	0.2250 μmol/mL～0.2750 μmol/mL	0.0014 μmol/mL	Gravimetric	
	L-Phenylalanine	0.2250 μmol/mL～0.2750 μmol/mL	0.0014 μmol/mL	Gravimetric	
	β-Alanine	0.2250 μmol/mL～0.2750 μmol/mL	0.0018 μmol/mL	Gravimetric	
	DL-3-Aminoisobutyric Acid	0.2250 μmol/mL～0.2750 μmol/mL	0.0020 μmol/mL	Gravimetric	
	L-Hydroxyproline	0.2250 μmol/mL～0.2750 μmol/mL	0.0029 μmol/mL	Gravimetric	
	L-Proline	0.2250 μmol/mL～0.2750 μmol/mL	0.0029 μmol/mL	Gravimetric	
Organic Reference Material Pure Organic Compound (Flexible Scope of Accreditation)	Pure Organic Compound (Single Component)	up to 80 %	－	Quantitative NMR Comparison with NIST(*1)-CRM.	2023.10.30

Note: Information on reference materials producible under the flexible scope of accreditation is available on the RMP's website (https://www.fujifilm.com/ffwk/ja/about/sustainability/quality/temp).

*1 National Institute of Standard and Technology

(End of Attachment)