



International Accreditation Japan (IAJapan) hereby accredits the following conformity assessment body as a calibration laboratory of Japan Calibration Service System.

Accreditation Identification: JCSS 0014 Calibration

Name of Conformity Assessment Body: Soka Factory, Kanto Chemical Co., Inc.

Name of Legal Entity: Kanto Chemical Co., Inc.

Location of Conformity Assessment Body: 1-7-1 Inari, Soka-shi, Saitama 340-0003, JAPAN

Scope of Accreditation: Concentration (as the following pages)

Accreditation Requirement: ISO/IEC 17025:2017*

* The relevant accreditation requirements described in the Accreditation

Scheme Document for JCSS are also applied.

Effective Date of Accreditation: 2023-10-25

Expiry Date of Accreditation: 2027-10-24

Date of Initial Accreditation: 2005-12-26

L. Saile

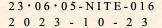
SAITO Kazunori

⁻ International Accreditation Japan (IAJapan) is a laboratory 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 for the traceability of measurement for MRA purpose.

⁻ This laboratory fulfills ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories. This accreditation means this laboratory meets both the technical competence requirements and management system requirements that are necessary for it to consistently deliver technically valid test results and calibrations (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).

⁻ The latest accreditation information is publicly available on IAJapan Website as an accreditation certificate.





International Accreditation Japan (IAJapan) hereby accredits the following conformity assessment body as a Reference Material Producer of Japan Calibration Service System.

Accreditation Identification: JCSS 0014 RMP

Name of Conformity Assessment Body: Soka Factory, Kanto Chemical Co., Inc.

Name of Legal Entity: Kanto Chemical Co., Inc.

Location of Conformity Assessment Body: 1-7-1 Inari, Soka-shi, Saitama 340-0003, JAPAN

Scope of Accreditation: Concentration (as the following pages)

Accreditation Requirement: ISO 17034:2016*

* The relevant accreditation requirements described in the Accreditation

Scheme Document for JCSS-RMP are also applied.

Effective Date of Accreditation: 2023-10-25

Expiry Date of Accreditation: 2027-10-24

Date of Initial Accreditation: 2008-11-06

L. Saile

SAITO Kazunori

⁻ International Accreditation Japan (IAJapan) is a laboratory 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 for 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.

< Calibration Laboratory >

General Field of Calibration: Concentration

Date of Initial Accreditation of the Field: 2005-12-26

Laboratory's permanent facility/On-site Calibration: Laboratory's permanent facility

Calibration and Measurement Capabilities

	Calibration Procedures# and ype of Instruments/Materials to be calibrated	Range	Expanded Uncertainty* (Level of Confidence Approximately 95 %)
Standard	Copper standard solution	100 mg/L	0.7 %
solutions		1000 mg/L	0.5 %
except pH Standard	Zinc standard solution	100 mg/L	0.7 %
solutions		1000 mg/L	0.4 %
	Cadmium standard solution	100 mg/L	0.9 %
		1000 mg/L	0.4 %
	Lead standard solution	100 mg/L	0.7 %
		1000 mg/L	0.4 %
	Iron standard solution	100 mg/L	0.7 %
		1000 mg/L	0.5 %
	Chromium standard solution	100 mg/L	0.8 %
		1000 mg/L	0.6 %
	Arsenic standard solution	100 mg/L	0.7 %
		1000 mg/L	0.4 %
	Manganese standard solution	100 mg/L	0.6 %
		1000 mg/L	0.4 %
	Nickel standard solution	100 mg/L	0.6 %
		1000 mg/L	0.4 %
-	Cobalt standard solution	100 mg/L	1.0 %
		1000 mg/L	0.4 %
	Bismuth standard solution	100 mg/L	0.9 %
		1000 mg/L	0.6 %
	Antimony standard solution	100 mg/L	0.8 %
		1000 mg/L	0.5 %
	Aluminum standard solution	1000 mg/L	0.5 %
	Calcium standard solution	1000 mg/L	0.5 %
	Potassium standard solution	1000 mg/L	0.6 %
	Magnesium standard solution	1000 mg/L	0.7 %
	Sodium standard solution	1000 mg/L	0.6 %
	Chloride ion standard solution	1000 mg/L	0.4 %
	Fluoride ion standard	1000 mg/L	0.5 %
	Nitrite ion standard solution	From 100 mg/L up to 1000 mg/L	0.7 %
		3280 mg/L	0.7 %
	Nitrate ion standard solution	From 100 mg/L up to 1000 mg/L	0.7 %
		4430 mg/L	0.6 %
	Phosphate ion standard solution	1000 mg/L	0.6 %
		3070 mg/L	0.7 %
	Sulfate ion standard solution	1000 mg/L	0.6 %
	Ammonium ion standard solution	From 100 mg/L up to 1000 mg/L	0.7 %
		1280 mg/L	0.6 %
	Mercury standard solution	1000 mg/L	0.8 %

Standard	Barium standard solution	1000 mg/L	0.7 %
solutions	Bromide ion standard solution	1000 mg/L	0.6 %
except pH Standard	Lithium standard solution	1000 mg/L	0.6 %
solutions	Molybdenum standard solution	1000 mg/L	0.8 %
	Rubidium standard solution	1000 mg/L	0.5 %
	Selenium standard solution	1000 mg/L	1.3 %
	Tin standard solution	1000 mg/L	0.8 %
	Strontium standard solution	1000 mg/L	0.4 %
	Thallium standard solution	1000 mg/L	0.9 %
	Boron standard solution	1000 mg/L	0.4 %
	Cesium standard solution	1000 mg/L	0.6 %
	Gallium standard solution	1000 mg/L	0.5 %
	Indium standard solution	1000 mg/L	0.5 %
	Tellurium standard solution	1000 mg/L	1.6 %
	Vanadium standard solution	1000 mg/L	0.6 %
	Formaldehyde standard solution	1000 mg/L	4.0 %
	Cyanide ion standard solution	1000 mg/L	3.4 %
	Chlorate ion standard solution	1000 mg/L	0.7 %
	Bromate ion standard solution	2000 mg/L	0.7 %
	Total organic carbon standard solution	1000 mg/L	0.5 %
	Silver standard solution	1000 mg/L	0.7 %
	Chlorite ion standard solution	1000 mg/L	1.8 %
	Heptaoxyethylene dodecyl ether solution	100 mg/L	4.2 %
	Beryllium standard solution	1000 mg/L	0.5 %
	Silicon standard solution	1000 mg/L	1.5 %
	Zirconium standard solution	1000 mg/L	0.4 %

Standard	23 VOC mixture standard solution		
solutions	** Any combina	ation of constituents listed as be	elow can be supplied.
except pH Standard	1,1-Dichloroethylene	1000 mg/L	2.0 %
solutions	Dichloromethane	1000 mg/L	1.0 %
	trans-1,2- Dichloroethylene	1000 mg/L	1.2 %
	cis-1,2-Dichloroethylene	1000 mg/L	0.9 %
	Chloroform	1000 mg/L	0.9 %
	1,1,1-Trichloroethane	1000 mg/L	0.9 %
	Carbon tetrachloride	1000 mg/L	1.0 %
	Benzene	1000 mg/L	1.0 %
	1,2-Dichloroethane	1000 mg/L	0.9 %
	Trichloroethylene	1000 mg/L	0.9 %
	1,2-Dichloropropane	1000 mg/L	0.8 %
	Bromodichloromethane	1000 mg/L	0.9 %
	cis-1,3- Dichrolopropene	1000 mg/L	3.5 %
	Toluene	1000 mg/L	0.9 %
	trans-1,3-Dichrolopropene	1000 mg/L	4.7 %
	1,1,2-Trichloroethane	1000 mg/L	1.0 %
	Tetrachloroethylene	1000 mg/L	0.9 %
	Dibromochloromethane	1000 mg/L	1.0 %
	p-Xylene	1000 mg/L	1.0 %
	<i>m</i> -Xylene	1000 mg/L	1.0 %
	o-Xylene	1000 mg/L	0.8 %
	Tribromomethane	1000 mg/L	1.2 %
	1,4-Dichlorobenzene	1000 mg/L	0.9 %

Standard solutions	25 VOC mixture standard solution ** Any combination of constituents listed as below can be supplie				
except pH	1,1-Dichloroethylene	1000 mg/L	1.6 %		
Standard	Dichloromethane	1000 mg/L	1.1 %		
solutions	trans-1,2- Dichloroethylene	1000 mg/L	1.2 %		
	tert-Butyl methyl ether	1000 mg/L	0.8 %		
	cis-1,2-Dichloroethylene	1000 mg/L	0.9 %		
	Chloroform	1000 mg/L	1.0 %		
	1,1,1-Trichloroethane	1000 mg/L	1.0 %		
	Carbon tetrachloride	1000 mg/L	1.3 %		
	Benzene	1000 mg/L	1.0 %		
	1,2-Dichloroethane	1000 mg/L	0.9 %		
	Trichloroethylene	1000 mg/L	1.0 %		
	1,2-Dichloropropane	1000 mg/L	0.9 %		
	1,4-dioxane	1000 mg/L	2.5 %		
	Bromodichloromethane	1000 mg/L	1.0 %		
	cis-1,3- Dichrolopropene	1000 mg/L	3.2 %		
	Toluene	1000 mg/L	0.9 %		
	trans-1,3-Dichrolopropene	1000 mg/L	4.5 %		
	1,1,2-Trichloroethane	1000 mg/L	1.0 %		
	Tetrachloroethylene	1000 mg/L	1.0 %		
	Dibromochloromethane	1000 mg/L	1.1 %		
	<i>p</i> -Xylene	1000 mg/L	0.9 %		
	<i>m</i> -Xylene	1000 mg/L	0.9 %		
	o-Xylene	1000 mg/L	1.0 %		
	Tribromomethane	1000 mg/L	1.1 %		
	1,4-Dichlorobenzene	1000 mg/L	1.1 %		
	14 metal mixture standard solution				
	Aluminum	100 mg/L	1.8 %		
	Arsenic	10 mg/L	1.9 %		
	Boron	100 mg/L	1.8 %		
	Calcium	100 mg/L	2.1 %		
	Cadmium	5 mg/L	1.8 %		
	Chromium	10 mg/L	1.9 %		
	Copper	100 mg/L	1.9 %		
	Iron	100 mg/L	1.8 %		
	Magnesium	100 mg/L	1.8 %		
	Manganese	10 mg/L	2.0 %		
	Sodium	100 mg/L	2.0 %		
	Lead	10 mg/L	1.9 %		
	Selenium	10 mg/L	2.2 %		
	Zinc	100 mg/L	2.8 %		

Standard	6 p	henols mixture standard solution		
solutions		2-Chlorophenol	1000 mg/L	1.8 %
except pH		Phenol	1000 mg/L	1.9 %
Standard		2,6-Dichlorophenol	1000 mg/L	2.0 %
solutions		2,4-Dichlorophenol	1000 mg/L	2.0 %
		2,4,6-Trichlorophenol	1000 mg/L	2.1 %
		4-Chlorophenol	1000 mg/L	2.0 %
	2 N	Austy odour substance mixture standard solution		
		2-Methylisoborneol	100 mg/L	2.6 %
		Geosmin	100 mg/L	2.5 %
	4 F	Ialoacetic acid mixture standard solution		
		Chloroacetic acid	1000 mg/L	2.3 %
		Bromoacetic acid	1000 mg/L	2.6 %
		Dichloroacetic acid	1000 mg/L	2.7 %
		Trichloroacetic acid	1000 mg/L	2.6 %

#All Calibration Procedures are in-house procedures developed by this laboratory.

^{*} relative value

< Reference Material Producer >

Category: Concentration

Date of Initial Accreditation of the Field: 2008-11-06
Type: Certified Reference Material

The Approach Used to Assign Property Values: Measurement by a Single Method in a Single Laboratory (ISO 17034:2016

7.12.3 NOTE 1 d))

S	ub-category and Property	Range	Expanded Uncertainty*1 (Level of Confidence Approximately 95 %)	Characterization Techniques*2
Standard	Copper standard solution	100 mg/L	0.7%	Titration
solutions		1000 mg/L	0.5 %	Tiuation
except pH	Zinc standard solution	100 mg/L	0.7 %	Titration
Standard solutions		1000 mg/L	0.4 %	Tiuanon
solutions	Cadmium standard solution	100 mg/L	0.9 %	Titration
		1000 mg/L	0.4 %	Thanon
	Lead standard solution	100 mg/L	0.7 %	Titration
		1000 mg/L	0.4 %	Tuation
	Iron standard solution	100 mg/L	0.7 %	Titration
		1000 mg/L	0.5 %	Tuation
	Chromium standard solution	100 mg/L	0.8 %	Titration
		1000 mg/L	0.6 %	Tuation
	Arsenic standard solution	100 mg/L	0.7 %	Titration
		1000 mg/L	0.4 %	Tuation
	Manganese standard solution	100 mg/L	0.6 %	Titration
		1000 mg/L	0.4 %	Tuation
	Nickel standard solution	100 mg/L	0.6 %	Titration
		1000 mg/L	0.4 %	Tuation
	Cobalt standard solution	100 mg/L	1.0 %	Titration
		1000 mg/L	0.4 %	Tuation
	Bismuth standard solution	100 mg/L	0.9 %	Titration
		1000 mg/L	0.6 %	Thration
	Antimony standard solution	100 mg/L	0.8 %	Titration
		1000 mg/L	0.5 %	Thanon
	Aluminum standard solution	1000 mg/L	0.5 %	Titration
	Calcium standard solution	1000 mg/L	0.5 %	Titration
	Potassium standard solution	1000 mg/L	0.6 %	IC
	Magnesium standard solution	1000 mg/L	0.7 %	Titration
	Sodium standard solution	1000 mg/L	0.6 %	IC
	Chloride ion standard solution	1000 mg/L	0.4 %	Titration
	Fluoride ion standard	1000 mg/L	0.5 %	Titration
	Nitrite ion standard solution	From 100 mg/L up to 1000 mg/L	0.7 %	IC
		3280 mg/L	0.7 %	
	Nitrate ion standard solution	From 100 mg/L up to 1000 mg/L	0.7 %	IC
		4430 mg/L	0.6 %	

Standard	Phosphate ion standard solution	1000 mg/L	0.6 %	TP:
solutions	•	3070 mg/L	0.7 %	Titration
except pH	Sulfate ion standard solution	1000 mg/L	0.6 %	IC
Standard solutions	Ammonium ion standard solution	From 100 mg/L up to 1000 mg/L	0.7 %	Titration
	Solution	1280 mg/L	0.6 %	
	Mercury standard solution	1000 mg/L	0.8 %	Titration
	Barium standard solution	1000 mg/L	0.7 %	Titration
	Bromide ion standard solution	1000 mg/L	0.6 %	Titration
	Lithium standard solution	1000 mg/L	0.6 %	IC
	Molybdenum standard solution	1000 mg/L	0.8 %	Titration
	Rubidium standard solution	1000 mg/L	0.5 %	IC
	Selenium standard solution	1000 mg/L	1.3 %	Titration
	Tin standard solution	1000 mg/L	0.8 %	Titration
	Strontium standard solution	1000 mg/L	0.4 %	Titration
	Thallium standard solution	1000 mg/L	0.9 %	Titration
	Boron standard solution	1000 mg/L	0.4 %	Titration
	Cesium standard solution	1000 mg/L	0.6 %	IC
	Gallium standard solution	1000 mg/L	0.5 %	Titration
	Indium standard solution	1000 mg/L	0.5 %	Titration
	Tellurium standard solution	1000 mg/L	1.6 %	Titration
	Vanadium standard solution	1000 mg/L	0.6 %	Titration
	Formaldehyde standard solution	1000 mg/L	4.0 %	GC
	Cyanide ion standard solution	1000 mg/L	3.4 %	Titration
	Chlorate ion standard solution	1000 mg/L	0.7 %	IC
	Bromate ion standard solution	2000 mg/L	0.7 %	IC
	Total organic carbon standard solution	1000 mg/L	0.5 %	HPLC
	Silver standard solution	1000 mg/L	0.7 %	Titration
	Chlorite ion standard solution	1000 mg/L	1.8 %	IC
	Heptaoxyethylene dodecyl ether solution	100 mg/L	4.2 %	HPLC
	Beryllium standard solution	1000 mg/L	0.5 %	IC
	Silicon standard solution	1000 mg/L	1.5 %	IC
	Zirconium standard solution	1000 mg/L	0.4 %	Titration

Standard	23 VOC mixture standard solution			
solutions	*	** Any combination of co	nstituents listed as belo	w can be supplied.
except pH Standard	1,1-Dichloroethylene	1000 mg/L	2.0 %	
solutions	Dichloromethane	1000 mg/L	1.0 %	
Solutions	trans-1,2- Dichloroethylene	1000 mg/L	1.2 %	
	cis-1,2-Dichloroethylene	1000 mg/L	0.9 %	
	Chloroform	1000 mg/L	0.9 %	
	1,1,1-Trichloroethane	1000 mg/L	0.9 %	
	Carbon tetrachloride	1000 mg/L	1.0 %	
	Benzene	1000 mg/L	1.0 %	
	1,2-Dichloroethane	1000 mg/L	0.9 %	
	Trichloroethylene	1000 mg/L	0.9 %	
	1,2-Dichloropropane	1000 mg/L	0.8 %	
	Bromodichloromethane	1000 mg/L	0.9 %	GC
	cis-1,3- Dichrolopropene	1000 mg/L	3.5 %	
	Toluene	1000 mg/L	0.9 %	
	trans-1,3-Dichrolopropene	1000 mg/L	4.7 %	
	1,1,2-Trichloroethane	1000 mg/L	1.0 %	
	Tetrachloroethylene	1000 mg/L	0.9 %	
	Dibromochloromethane	1000 mg/L	1.0 %	
	<i>p</i> -Xylene	1000 mg/L	1.0 %	
	<i>m</i> -Xylene	1000 mg/L	1.0 %	
	o-Xylene	1000 mg/L	0.8 %	
	Tribromomethane	1000 mg/L	1.2 %	
	1,4-Dichlorobenzene	1000 mg/L	0.9 %	

Standard solutions	25 VOC mixture standard solution **	* Any combination of co	onstituents listed as belo	ow can be supplied.
except pH	1,1-Dichloroethylene	1000 mg/L	1.6 %	
Standard	Dichloromethane	1000 mg/L	1.1 %	
solutions	trans-1,2- Dichloroethylene	1000 mg/L	1.2 %	
	tert-Butyl methyl ether	1000 mg/L	0.8 %	
	cis-1,2-Dichloroethylene	1000 mg/L	0.9 %	
	Chloroform	1000 mg/L	1.0 %	
	1,1,1-Trichloroethane	1000 mg/L	1.0 %	
	Carbon tetrachloride	1000 mg/L	1.3 %	
	Benzene	1000 mg/L	1.0 %	
	1,2-Dichloroethane	1000 mg/L	0.9 %	
	Trichloroethylene	1000 mg/L	1.0 %	
	1,2-Dichloropropane	1000 mg/L	0.9 %	
	1,4-dioxane	1000 mg/L	2.5 %	GC
	Bromodichloromethane	1000 mg/L	1.0 %	
	cis-1,3- Dichrolopropene	1000 mg/L	3.2 %	
	Toluene	1000 mg/L	0.9 %	
	trans-1,3-Dichrolopropene	1000 mg/L	4.5 %	
	1,1,2-Trichloroethane	1000 mg/L	1.0 %	
	Tetrachloroethylene	1000 mg/L	1.0 %	
	Dibromochloromethane	1000 mg/L	1.1 %	
	<i>p</i> -Xylene	1000 mg/L	0.9 %	
	<i>m</i> -Xylene	1000 mg/L	0.9 %	
	o-Xylene	1000 mg/L	1.0 %	
	Tribromomethane	1000 mg/L	1.1 %	
	1,4-Dichlorobenzene	1000 mg/L	1.1 %	
	14 metal mixture standard solution		,	
	Aluminum	100 mg/L	1.8 %	
	Arsenic	10 mg/L	1.9 %	
	Boron	100 mg/L	1.8 %	
	Calcium	100 mg/L	2.1 %	
	Cadmium	5 mg/L	1.8 %	
	Chromium	10 mg/L	1.9 %	
	Copper	100 mg/L	1.9 %	707.070
	Iron	100 mg/L	1.8 %	ICP-OES
	Magnesium	100 mg/L	1.8 %	
	Manganese	10 mg/L	2.0 %	
	Sodium	100 mg/L	2.0 %	
	Lead	10 mg/L	1.9 %	
	Selenium	10 mg/L	2.2 %	
	Zinc	100 mg/L	2.8 %	

Standard	6 phenols mixture standard solution			
solutions	2-Chlorophenol	1000 mg/L	1.8 %	
except pH Standard	Phenol	1000 mg/L	1.9 %	
solutions	2,6-Dichlorophenol	1000 mg/L	2.0 %	GC
	2,4-Dichlorophenol	1000 mg/L	2.0 %	GC
	2,4,6-Trichlorophenol	1000 mg/L	2.1 %	
	4-Chlorophenol	1000 mg/L	2.0 %	
	2 Musty odor substance mixture standa	rd solution		
	2-Methylisoborneol	100 mg/L	2.6 %	CC
	Geosmin	100 mg/L	2.5 %	GC
	4 Haloacetic acid mixture standard solu	ition		
	Chloroacetic acid	1000 mg/L	2.3 %	
	Bromoacetic acid	1000 mg/L	2.6 %	IIDI C
	Dichloroacetic acid	1000 mg/L	2.7 %	HPLC
	Trichloroacetic acid	1000 mg/L	2.6%	

^{*1} relative value

GC: Gas chromatography
ICP-OES: Inductivity coupled plasma-optical emission spectroscopy
HPLC: High-performance liquid chromatography

^{*2} IC: Ion chromatography



Certificate

Reference material

Magnesium Standard Solution 2(Mg 1000)

Cat.No.25840-3B

Manufacturer:

Kanto Chemical Co., Inc. Soka factory

Lot number:

303K9517

Intended use:

For chemical analysis, mainly ion chromatographic analysis.

Usage:

Overturn the bottle gently a few times in order to mix the contents

well before opening the bottle.

Cap the bottle tightly, immediately after use.

Storage condition:

Avoid sunlight and store at an ordinary temperature (5 $^{\circ}$ C \sim 35 $^{\circ}$ C).

Calibration method:

Titration method.

Calibration location:

Kanto Chemical Co., Inc. Soka factory

Calibration result*:

992 mg/L

Relative expanded uncertainty** 0.5 %

(Coverage factor k=2, Level of confidence approximately 95 %)

Remarks

*Calibration result is the concentration at 20 °C.

**Relative expanded uncertainty includes the uncertainty of the

storage stability within the warranty period.

Calibration date:

March 11, 2021

Expiry date:

The end of March, 2023

We hereby certify that the calibration result is the above value.

Date of issue: March 23, 2021 The Issuing Authority

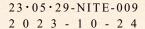
Inspection manager: Masaaki Tsunoda Kanto Chemical Co., Inc. Soka factory

7-1, Inari 1-chome, Soka-city, Saitama, Japan

This certificate is based on article 144 of the Measurement Law and indicates the result of calibration in accordance with measurement standards traceable to Primary Measurement Standards (National Standards) which realizes the physical units of measurement according to the International System of Units (SI). The accreditation symbol is attestation of which the result of calibration is traceable to Primary Measurement Standards (National Standards)

The certificate shall not be reproduced except in full, without the written approval of the issuing laboratory. We have the reference material producer/calibration laboratory who issued this certificate conforms to ISO/IEC 17025:2017 and ISO 17034:2016. This certificate shows the result of calibration to reference material which meets the demand of certified reference material (CRM) described in JIS Q 17034 (ISO 17034:2016) This certificate was issued by the calibration laboratory and reference material producer accredited by IAJapan who is a signatory to the Mutual Recognition Arrangement (MRA) of International Laboratory Accreditation Cooperation (ILAC) and Asia Pacific Accreditation Cooperation (APAC). This (These) calibration result(s) may be accepted internationally through ILAC and/or APAC MRA.

Intended use, usage, storage conditions, and expiry date are described based on JIS Q 0031 (ISO Guide 31:2015), and they are not required in article 144 of the Measurement Law.





International Accreditation Japan (IAJapan) hereby accredits the following conformity assessment body as a calibration laboratory of Japan Calibration Service System.

Accreditation Identification: JCSS 0015 Calibration

Name of Conformity Assessment Body: Isehara Factory, Kanto Chemical Co., Inc.

Name of Legal Entity: Kanto Chemical Co., Inc.

Location of Conformity Assessment Body: 21 Suzukawa, Isehara-shi, Kanagawa 259-1146, JAPAN

Scope of Accreditation: Concentration(as the following pages)

Accreditation Requirement: ISO/IEC 17025:2017*

* The relevant accreditation requirements described in the Accreditation

Scheme Document for JCSS are also applied.

Effective Date of Accreditation: 2023-10-25

Expiry Date of Accreditation: 2027-10-24

Date of Initial Accreditation: 2005-12-26

L. Saile

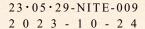
SAITO Kazunori

⁻ International Accreditation Japan (IAJapan) is a laboratory accreditation body which has signed MRAs of ILAC (International Laboratory Accreditation Cooperation) and APAC (Asia Pacific Accreditation Cooperation).

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International Accreditation Japan (IAJapan) hereby accredits the following conformity assessment body as a Reference Material Producer of Japan Calibration Service System.

Accreditation Identification: JCSS 0015 RMP

Name of Conformity Assessment Body: Isehara Factory, Kanto Chemical Co., Inc.

Name of Legal Entity: Kanto Chemical Co., Inc.

Location of Conformity Assessment Body: 21 Suzukawa, Isehara-shi, Kanagawa 259-1146, JAPAN

Scope of Accreditation: Concentration(as the following pages)

Accreditation Requirement: ISO 17034:2016*

* The relevant accreditation requirements described in the Accreditation

Scheme Document for JCSS-RMP are also applied.

Effective Date of Accreditation: 2023-10-25

Expiry Date of Accreditation: 2027-10-24

Date of Initial Accreditation: 2009-01-29



SAITO Kazunori

⁻ International Accreditation Japan (IAJapan) is a laboratory 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 for 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.

< Calibration Laboratory >

General Field of Calibration: Concentration

Date of Initial Accreditation of the Field: 2005-12-26

<u>Laboratory's permanent facility/On-site Calibration: Laboratory's permanent facility</u>

Calibration and Measurement Capabilities

	Calibration Procedures# and Type of Instruments/Materials to be calibrated		Expanded Uncertainty (Level of Confidence Approximately 95 %)
pH Standard Solutions	Oxalate pH standard solution	1.679	0.005
Phthalate pH standard solution		4.008	0.005
	Phosphate equimolal pH standard solution		0.005
	Phosphate pH standard solution	7.413	0.006
Tetraborate pH standard solution Carbonate pH standard solution		9.180	0.005
		10.012	0.006

[#]All Calibration Procedures are in-house procedures developed by this laboratory.

< Reference Material Producer >

Category: Concentration

Date of Initial Accreditation of the Field: 2009-01-29

Type: Certified Reference Material

The Approach Used to Assign a Property Value: Measurement by a Single Method in a Single Laboratory (ISO 17034:2016 7.12.3 NOTE 1 d))

Sul	b-category and Property	Range	Expanded Uncertainty (Level of Confidence Approximately 95 %)	Characterization Techniques
pH Standard Solutions	Oxalate pH standard solution	1.679	0.005	
	Phthalate pH standard solution	4.008	0.005	
	Phosphate equimolal pH standard solution	6.865	0.005	Glass electrode
	Phosphate pH standard solution	7.413	0.007	method
	Tetraborate pH standard solution	9.180	0.008	
	Carbonate pH standard solution	10.012	0.012	







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Certificate No. KI-1025

$\operatorname{Certificate}$

Reference Material Phthalate pH standard solution

Cat.No. 32798-08

Manufacturer:

Kanto Chemical Co., Inc. Isehara factory.

Lot number:

303N1829

Intended use:

For calibration of the pH meter.

Usage:

Overturn the bottle gently a few times in order to mix the contents

well before opening the bottle.

Rinse a clean vessel with the standard solution and then pour

the necessary quantity of the solution into the vessel.

Cap the bottle tightly, immediately after use.

Storage condition:

Don't Freeze. Avoid sunlight and store at below 25 °C.

Calibration method:

Calibrated by glass electrode method.

Calibration location:

Kanto Chemical Co., Inc. Isehara factory.

Calibration condition:

25 °C ± 0.1 °C

Calibration result and

 4.01 ± 0.015 pH

expanded uncertainty:

Coverage factor k=2, Level of Confidence Approximately 95 %.

Remarks

Expanded uncertainty includes the uncertainty of the storage stability

within the warranty period.

Calibration date:

March 23, 2021

Expiry date:

The end of February, 2022

We hereby certify that the calibration result is the above value.

Date of issue: March 23, 2021

The Issuing Authority

Factory manager: Shuki KAWAMOTO

Kanto Chemical Co., Inc. Isehara factory 21, Suzukawa Isehara-shi, Kanagawa, Japan

This certificate is based on article 144 of the Measurement Law and indicates the result of calibration in accordance with measurement standards traceable to Primary Measurement Standards (National Standards) which realizes the physical units of measurement according to the International System of Units (SI). The accreditation symbol is attestation of which the result of calibration is traceable to Primary Measurement Standards (National Standards).

The certificate shall not be reproduced except in full, without the written approval of the issuing laboratory. We have the reference material producer/calibration laboratory who issued this certificate conforms to ISO/IEC 17025:2017 and ISO 17034:2016. This certificate shows the result of calibration to reference material which meets the demand of certified reference material (CRM) described in JIS Q 17034 (ISO 17034:2016) This certificate was issued by the calibration laboratory and reference material producer accredited by IAJapan who is a signatory to the Mutual Recognition Arrangement (MRA) of International Laboratory Accreditation Cooperation (ILAC) and Asia Pacific Accreditation Cooperation (APAC). This (These) calibration result(s) may be accepted internationally through ILAC and/or APAC MRA.

Intended use, usage, storage conditions, and expiry date are described based on JIS Q 0031 (ISO Guide 31:2015), and they are not required in article 144 of the Measurement Law.

