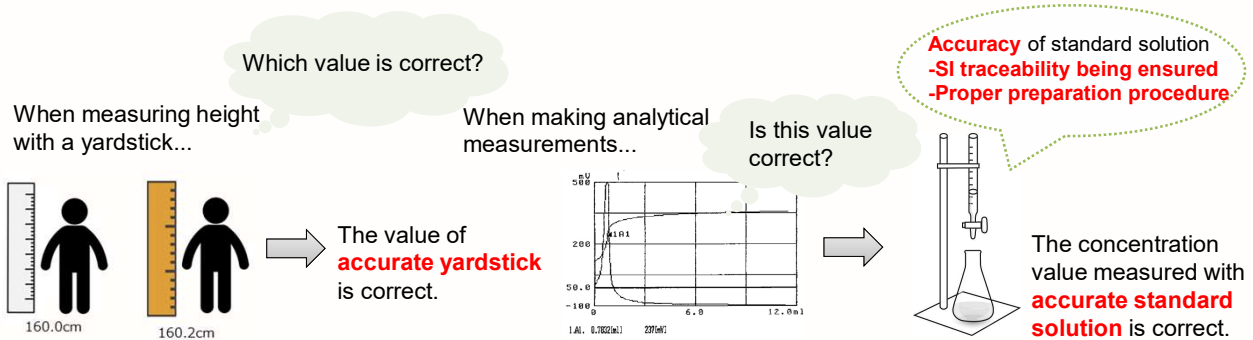
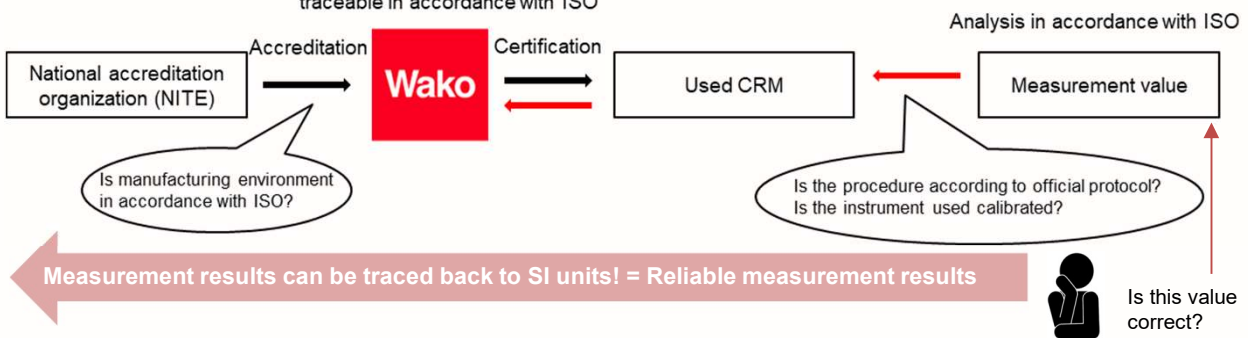


# Compliant with Japanese Pharmacopoeia Standard Solution for Volumetric Analysis

- ✓ Volumetric analysis is a method of quantitative (titration) based on the volume of a standard solution added to a sample solution at the point when it reacts without excess or deficiency. In order to perform accurate quantitative analysis, the concentration value of the standard solution must be accurate.



- ✓ Fujifilm Wako has a variety of standard solutions (CRM) for volumetric analysis prepared and standardized in accordance with the Japanese Pharmacopoeia (JP), and SI traceability of concentration values is also assured.  
Manufacture CRM which is SI traceable in accordance with ISO



## Standard Solution for Volumetric Analysis (for the JP General Tests, TraceSure®)

### ■ for the Japanese Pharmacopoeia General Tests



- ✓ CRM with assured SI traceable concentration value (factor)! (according to the ASNITE accreditation program)\*
- ✓ Standard solutions prepared and standardized according to the JP.
- ✓ Issue a certificate with the accreditation symbol (listed on concentration value, uncertainty, etc.)!

\*Some products are not CRM.

### ■ TraceSure®



- ✓ CRM with assured SI traceable certified value! (according to the ASNITE accreditation program)
- ✓ Reference material conforming to JIS K 8005.
- ✓ Issue a certificate with the accreditation symbol (listed on purity, uncertainty, etc.)!



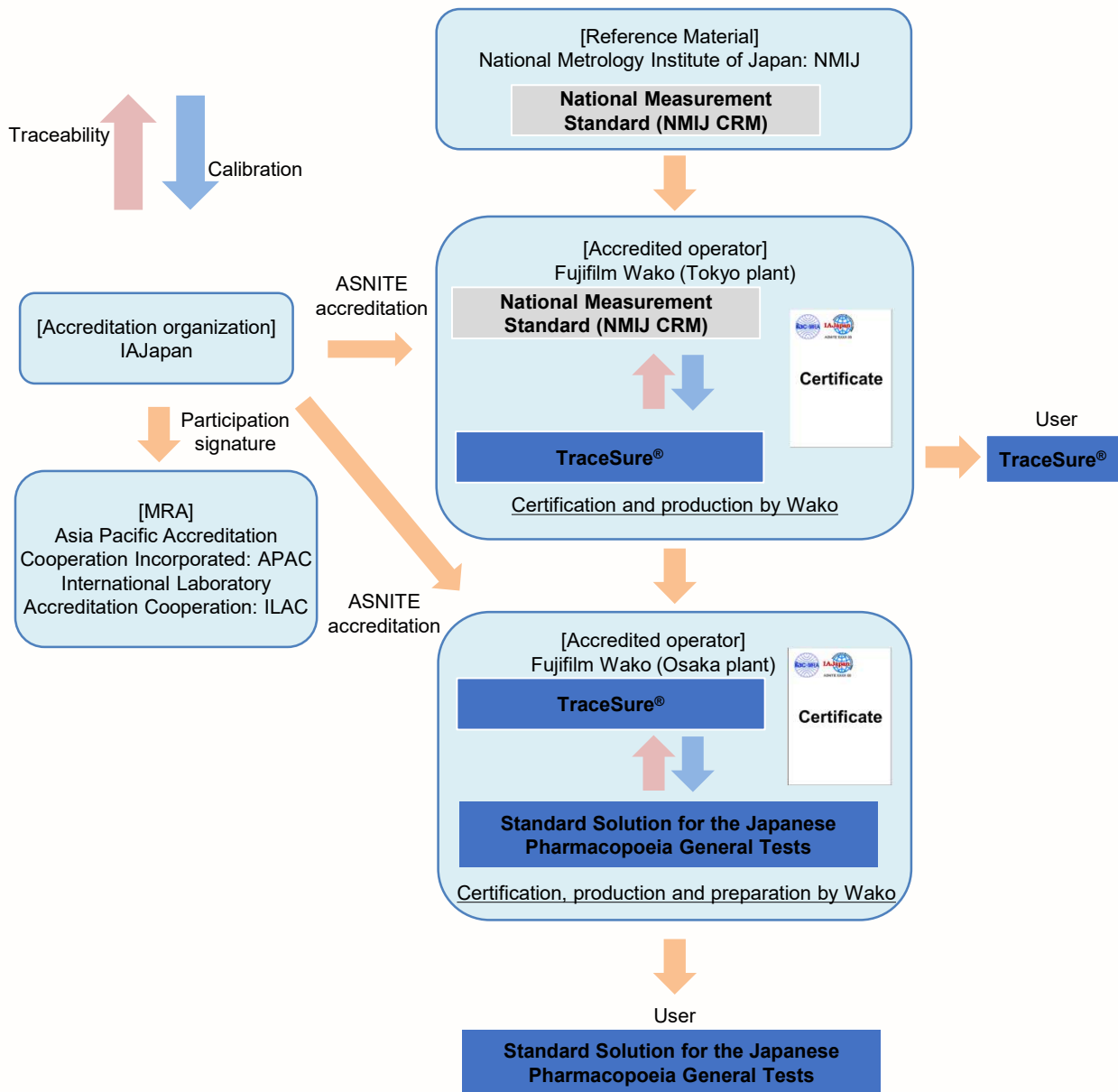
### ■ Differences in Grades

	for the JP General Tests [CRM]	for the JP General Tests	TraceSure®
Preparation and standardization in accordance with the JP (18 <sup>th</sup> edition)	✓	✓	-*1
CRM (SI traceability)	✓	-	✓
Attachment of certificate	✓*2	-	✓

\*1 TraceSure® is a single compound, not a prepared solution (We do not offer custom-made preparation).

\*2 Please contact us or our distributor for a certificate.

### ■ SI Traceability Mechanism



## Product List

### Standard Solution for the Japanese Pharmacopoeia General Tests [CRM]

Code No.	Product Name	Grade	Volume
082-10095	0.1 mol/L Hydrochloric Acid [CRM]	for the Japanese Pharmacopoeia General Tests	500 mL
084-10055	0.2 mol/L Hydrochloric Acid [CRM]	for the Japanese Pharmacopoeia General Tests	500 mL
087-10045	0.5 mol/L Hydrochloric Acid [CRM]	for the Japanese Pharmacopoeia General Tests	500 mL
080-10035	1 mol/L Hydrochloric Acid [CRM]	for the Japanese Pharmacopoeia General Tests	500 mL
083-10025	2 mol/L Hydrochloric Acid [CRM]	for the Japanese Pharmacopoeia General Tests	500 mL
197-18115	0.1 mol/L Silver Nitrate Solution [CRM]	for the Japanese Pharmacopoeia General Tests	500 mL
191-17915	1 mol/L Sodium Hydroxide Solution [CRM]	for the Japanese Pharmacopoeia General Tests	500 mL
198-17925	0.1 mol/L Sodium Thiosulfate Solution [CRM]	for the Japanese Pharmacopoeia General Tests	500 mL
190-17625	0.25 mol/L Sulfuric Acid [CRM]	for the Japanese Pharmacopoeia General Tests	500 mL
193-17615	0.05 mol/L Sulfuric Acid [CRM]	for the Japanese Pharmacopoeia General Tests	500 mL

### Standard Solution for the Japanese Pharmacopoeia General Tests

Code No.	Product Name	Grade	Volume
085-10105	0.05 mol/L Hydrochloric Acid	for the Japanese Pharmacopoeia General Tests	500 mL
160-29175	0.1 mol/L Potassium Hydroxide-Ethanol Solution [Aldehyde-free Ethanol]	for the Japanese Pharmacopoeia General Tests	500 mL
161-29085	0.5 mol/L Potassium Hydroxide-Ethanol Solution [Aldehyde-free Ethanol]	for the Japanese Pharmacopoeia General Tests	500 mL
194-17905	0.1 mol/L Sodium Hydroxide Solution	for the Japanese Pharmacopoeia General Tests	500 mL

### TraceSure® [CRM]

Code No.	Product Name	Grade	Volume
015-23371	Amidosulfuric Acid [CRM]	TraceSure®	50 g
167-25001	Potassium Dichromate [CRM]	TraceSure®	50 g
161-24661	Potassium Hydrogen Phthalate [CRM]	TraceSure®	50 g
160-24991	Potassium Iodate [CRM]	TraceSure®	50 g
190-16221	Sodium Carbonate [CRM]	TraceSure®	50 g
191-17351	Sodium Chloride [CRM]	TraceSure®	50 g
194-17782	Sodium Fluoride [CRM]	TraceSure®	25 g
192-15941	Sodium Oxalate [CRM]	TraceSure®	50 g

Please check our website for details.

TOP > Analytical Chemistry > Volumetric Analysis > Standard Solution for Volumetric Analysis  
<https://labchem-wako.fujifilm.com/us/category/00637.html>

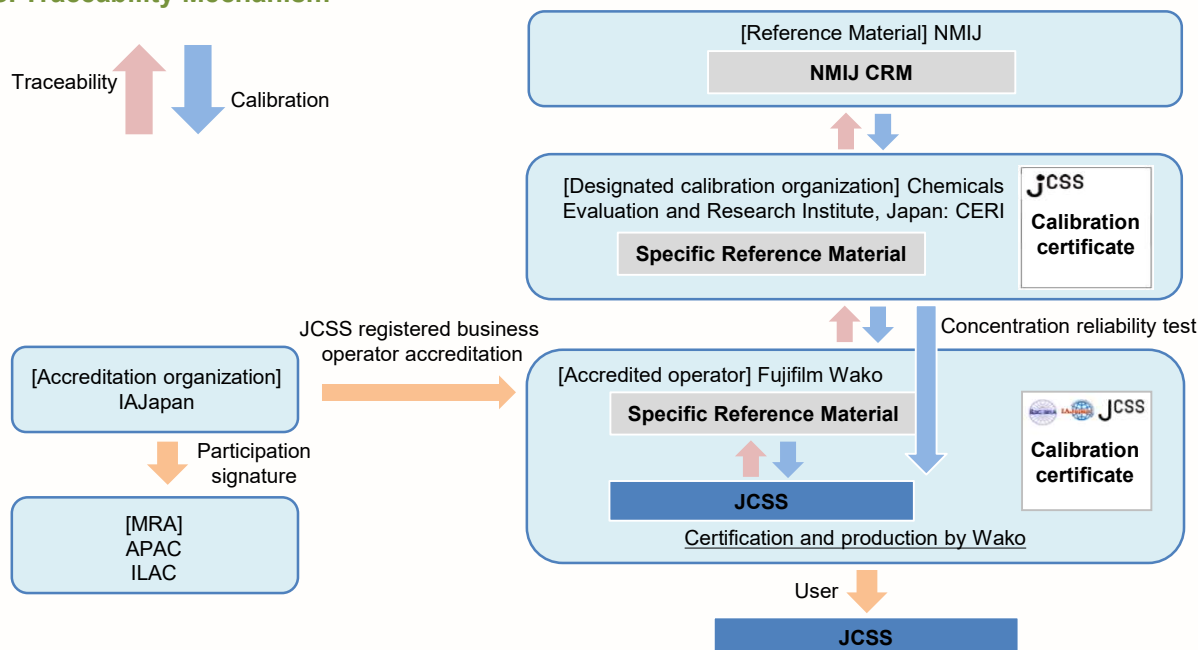


## Related Products

### ■ pH Standard Solution (JCSS)

In volumetric analysis using pH, the change in pH in a sample solution is compared with a standard solution to determine the reaction point and quantify the analyte. pH indicates the hydrogen ion activity in a solution, but since the hydrogen ion activity in a solution cannot be directly measured, the actual pH is measured by comparing the pH of sample solution to the pH of standard solution. Therefore, standard solution with an accurate pH value is important. Fujifilm Wako provides a variety of pH standard solutions as JCSS grade. JCSS are CRMs with SI traceability.

### ■ SI Traceability Mechanism



### ■ Product List

Code No.	Product Name	pH	Grade	Volume
151-01845	Oxalate pH Standard Solution	1.68	JCSS	500 mL
166-12141	Phthalate pH Standard Solution	4.01	JCSS	100 mL
168-12145			JCSS	500 mL
163-12151	Phosphate pH Standard Equimolal Solution	6.86	JCSS	100 mL
165-12155			JCSS	500 mL
166-17445	Phosphate pH Standard Solution	7.41	JCSS	500 mL
203-08771	Tetraborate pH Standard Solution	9.18	JCSS	100 mL
205-08775			JCSS	500 mL
037-16145	Carbonate pH Standard Solution	10.01	JCSS	500 mL

Please check our website for details.

TOP > Analytical Chemistry > Reference Material (SI Traceable) > JCSS pH Standard Solution  
<https://labchem-wako.fujifilm.com/us/category/01297.html>



Listed products are intended for laboratory research use only, and not to be used for drug, food or human use. / Please visit FUJIFILM Wako Laboratory Chemicals site: <https://labchem-wako.fujifilm.com/> / This leaflet may contain products that cannot be exported to your country due to regulations. / Bulk quote requests for some products are welcomed. Please contact us.

## FUJIFILM Wako Laboratory Chemicals site

<https://labchem-wako.fujifilm.com>



**FUJIFILM Wako Pure Chemical Corporation**  
 1-2, Doshomachi 3-Chome, Chuo-ku, Osaka 540-8605, Japan  
 Tel: +81 6 6203 3741 Fax: +81 6 6203 1999  
[ffwk-cservice@fujifilm.com](mailto:ffwk-cservice@fujifilm.com)

**FUJIFILM Wako Chemicals U.S.A. Corporation**  
 1600 Bellwood Road, Richmond, VA 23237, U.S.A.  
 Toll-Free (U.S. only): +1 877 714 1920  
 Tel: +1 804 271 7677 Fax: +1 804 271 7791  
[wkuslabchem@fujifilm.com](mailto:wkuslabchem@fujifilm.com)

**FUJIFILM Wako Chemicals Europe GmbH**  
 Fuggerstr 12, 41468 Neuss, Germany  
 Tel: +49 2131 311 0 Fax: +49 2131 311 100  
[labchem\\_wkeu@fujifilm.com](mailto:labchem_wkeu@fujifilm.com)

**FUJIFILM Wako Chemicals (Hong Kong) Limited**  
 Room 1111, 11/F, International Trade Centre, 11-19 Sha Tsui Road,  
 Tsuen Wan, N.T., Hong Kong  
 Tel: +852-2799-9019 Fax: +852-2799-9808  
[wkhk.info@fujifilm.com](mailto:wkhk.info@fujifilm.com)

**FUJIFILM Wako (Guangzhou) Trading Corporation**  
 Room 3003, 30/F., Dong Shan Plaza 69, Xian Lie Zhong Road,  
 Guangzhou, 510095, China  
 Tel: +86-20-8732-6381(Guangzhou) Tel: +86-21-6288-4751(Shanghai)  
 Tel: +86-10-6413-6388(Beijing)  
[wkgz.info@fujifilm.com](mailto:wkgz.info@fujifilm.com)