



International Accreditation Japan

Information on Accredited Reference Material Producer

Date of the update of the information : 2026-04-01

Accreditation Identification: ASNITE 0020 RMP

Name of Reference Material Producer : Institute of Geology and Geoinformation Geological Survey of Japan National Institute of Advanced Industrial Science and Technology

Location of Reference Material Producer : Central 7, 1-1-1 Higashi, Tsukuba-shi, Ibaraki 305-8567, JAPAN

Name of Legal Entity: National Institute of Advanced Industrial Science and Technology

Conformance Accreditation Standard: ISO 17034:2016

Expiry Date of Accreditation: 2028-01-26

Category: Chemical Reference Materials

Type: Certified Reference Material

The Approach Used to Assign a Property Value: Characterization of an operationally-defined measurand using two or more methods of demonstrable accuracy in one or more competent laboratories (ISO 17034:2016 7.12.3.c)

Sub-category	Name of Materials	Property	Range of Property Value (% as mass fraction)	Characterization Technique (s)	Effective Date of Accreditation
Geochemical Certified Reference Material	Rock Sediment Soil Clay	Silicon dioxide	35 % to 80 %	Gravimetric analysis, Molecular absorption spectrometry, ICP-AES ^{*1} , AAS ^{*2}	2024-01-27
		Titanium oxide	0.1 % to 2 %	ICP-AES ^{*1} , AAS ^{*2}	
		Aluminum oxide	3 % to 30 %		
		Iron (III) oxide	1 % to 20 %		
		Iron (II) oxide	0.5 % to 10 %	Titrimetry	
		Manganese oxide	0.05 % to 3 %	ICP-AES ^{*1} , AAS ^{*2}	
		Magnesium oxide	1 % to 45 %		
		Calcium oxide	0.5 % to 20 %		
		Sodium oxide	0.2 % to 10 %		
		Potassium oxide	0.1 % to 5 %		
	Phosphorus pentoxide	0.05 % to 2 %			
	Carbonate Rock	Calcium oxide	50 % to 56 %	ICP-AES ^{*1} , AAS ^{*2}	
		Aluminum	50 mg/kg to 150 mg/kg		
		Barium	5 mg/kg to 530 mg/kg		
		Iron	15 mg/kg to 130 mg/kg		
		Potassium	80 mg/kg to 200 mg/kg		
		Magnesium	200 mg/kg to 4000 mg/kg		
		Manganese	0.2 mg/kg to 20 mg/kg		
		Sodium	4000 mg/kg to 5000 mg/kg		
Phosphorus		3 mg/kg to 150 mg/kg			
Strontium	200 mg/kg to 8000 mg/kg				

*1 ICP-AES: Inductivity coupled plasma-atomic emission spectroscopy

*2 AAS: Atomic absorption spectrometry

Sub- category	Name of Materials	Property	Range of Property Value (% as mass fraction)	Characterization Technique (s)	Effective Date of Accreditation
Geochemical Certified Reference Material	Ore Mineral	Titanium oxide	0.01 % to 1 %	ICP-AES ^{*1} , AAS ^{*2}	2024-01-27
		Aluminum oxide	0.2 % to 15 %		
		Iron (III) oxide	8 % to 26 %		
		Manganese oxide	0.5 % to 2 %		
		Magnesium oxide	1 % to 4 %		
		Calcium oxide	4 % to 25 %		
		Sodium oxide	0.05 % to 1 %		
		Potassium oxide	0.01 % to 3 %		
		Copper	3 % to 4 %		
		Zinc	0.05 % to 5 %		
		Lead	0.1 % to 1 %		

*1 ICP-AES: Inductivity coupled plasma-atomic emission spectroscopy

*2 AAS: Atomic absorption spectrometry

(End of Attachment)