

SAFETY DATA SHEET

Australian statement of hazardous nature: Classified as hazardous according to criteria of Safe Work Australia

Section 1 - Identification

Product Name Sodium 1000ppm single element std

Product Code ACR19631, AJA2600, AJA2648, ALF013832, ALF014400, ALF088097, ROA0749,

ROA0750, SPXCLNA2, SPXPLNA2

Address ThermoFisher Scientific Australia Pty Ltd

5 Caribbean Drive, Scoresby VICTORIA 3179, Australia

Emergency Tel. CHEMTREC®

03 9757 4559 or +613 9757 4559

Telephone / Fax Numbers Tel: 1300 735 292

Fax: 1800 067 639

E-mail address <u>auinfo@thermofisher.com</u>

Recommended Use Laboratory chemicals.

Section 2 - Hazard(s) Identification

Classification under Safe Work Australia

Classified as hazardous according to criteria of Safe Work Australia

Physical hazards

Substances/mixtures corrosive to metal Category 1

Health hazards

Skin Corrosion/Irritation Category 1 B
Serious Eye Damage/Eye Irritation Category 1

Environmental hazards
No hazards identified

Label Elements

Exclamation Mark



Signal Word Danger

AUS-000703 Version 1 04-Jul-2020 Page 1/9

Hazard Statements

H290 - May be corrosive to metals

H318 - Causes serious eye damage

H314 - Causes severe skin burns and eye damage

Precautionary Statements

P234 - Keep only in original container

P264 - Wash face, hands and any exposed skin thoroughly after handling

P271 - Use only outdoors or in a well-ventilated area

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting

P303 + P361 + P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P310 - Immediately call a POISON CENTER or doctor/physician

P363 - Wash contaminated clothing before reuse

P390 - Absorb spillage to prevent material damage

P402 - Store in a dry place

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

P406 - Store in corrosion resistant polypropylene container with a resistant inliner

P501 - Dispose of contents/ container to an approved waste disposal plant

Other information

No information available

Section 3 - Composition and Information on Ingredients

Component	CAS-No	Weight %
Water	7732-18-5	94.77
Nitric acid	7697-37-2	5
Sodium carbonate	497-19-8	0.23

Section 4 - First Aid Measures

Inhalation If not breathing, give artificial respiration. Remove from exposure, lie down. Do not use

mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory

medical device. Call a physician immediately.

Ingestion Do NOT induce vomiting. Clean mouth with water. Never give anything by mouth to an

unconscious person. Call a physician immediately.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes. Remove and wash

contaminated clothing and gloves, including the inside, before re-use. Call a physician

immediately.

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Immediate medical attention is required.

General Advice Show this safety data sheet to the doctor in attendance. Immediate medical attention is

required.

Self-Protection of the First Aider Ensure that medical personnel are aware of the material(s) involved, take precautions to

protect themselves and prevent spread of contamination.

AUS-000703 Version 1 04-Jul-2020 Page 2 / 9

First Aid Facilities Eyewash, safety shower and washroom.

Most important symptoms and

effects

Causes burns by all exposure routes. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue

and danger of perforation

Notes to Physician Treat symptomatically.

Section 5 - Fire Fighting Measures

Suitable Extinguishing Media

Not combustible. CO₂, dry chemical, dry sand, alcohol-resistant foam.

Extinguishing media which must not be used for safety reasons

No information available.

Hazardous Decomposition Products

Carbon monoxide (CO), Carbon dioxide (CO2), Nitrogen oxides (NOx), Sodium oxides.

Specific Hazards Arising from the Chemical

Thermal decomposition can lead to release of irritating gases and vapors. The product causes burns of eyes, skin and mucous membranes.

Special protective equipment and precautions for fire fighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

Section 6 - Accidental Release Measures

Emergency procedures

Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

Environmental Precautions

Should not be released into the environment. See Section 12 for additional Ecological Information.

Methods for Containment and Clean Up

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

Reference to Other Sections

Refer to protective measures listed in Sections 8 and 13.

Section 7 - Handling and Storage

Precautions for Safe Handling

Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Use only under a chemical fume hood. Do not breathe mist/vapors/spray. Do not ingest. If swallowed then seek immediate medical assistance.

Conditions for Safe Storage, Including any Incompatibilities

Corrosives area. Keep containers tightly closed in a dry, cool and well-ventilated place.

AS/NZS 2243.10:2004, Safety in laboratories - Storage of chemicals

Section 8 - Exposure Controls and Personal Protection

Exposure limits

AUS - Exposure Standards for Atmospheric Contaminants in the Occupational Environment - Guidance Note on the Interpretation of Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:3008(1995)] Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003(1995)] updated in August, 2005. Safe Work Australia ACGIH - Threshold Limit Values - Ceiling (TLV-C) guidelines by the American Conference of Governmental Industrial Hygienists (ACGIH) for controlling worker exposure to airborne chemical concentrations in the workplace. UK - EH40/2005 Work Exposure Limits, Third edition. Published 2018. DE - MAK and BAT values of Hazardous

AUS-000703 Version 1 04-Jul-2020 Page 3 / 9

Chemical Compounds in the Work Area. Published by German Research Foundation on July 1, 2011

L	Component	Australia	New Zealand WEL	ACGIH TLV	The United Kingdom	Germany
Ī	Nitric acid	STEL: 4 ppm	TWA: 2 ppm	TWA: 2 ppm	STEL: 1 ppm 15 min	TWA: 1 ppm (8
		STEL: 10 mg/m ³	TWA: 5.2 mg/m ³	STEL: 4 ppm	STEL: 2.6 mg/m ³ 15 min	Stunden). AGW -
		TWA: 2 ppm	STEL: 4 ppm		_	TWA: 2.6 mg/m ³ (8
		TWA: 5.2 mg/m ³	STEL: 10 mg/m ³			Stunden). AGW -

Biological limit values

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

Exposure Controls

Engineering Measures

Ensure that eyewash stations and safety showers are close to the workstation location.

Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source

Personal protective equipment

Eye Protection Goggles (Australian/New Zealand Standard AS/NZS 1337 - Eye protectors for Industrial

applications)

Hand Protection Protective gloves

Glove material	Breakthrough time	Glove thickness	AUS/NZ Standard	Glove comments
Neoprene	See manufacturers	-	AS/NZS 2161.1	(minimum requirement)
	recommendations			

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

Skin and body protection Long sleeved clothing

Repiratory Protection Use an AS/NZS 1716 approved respirator if exposure limits are exceeded or if irritation or

other symptoms are experienced. To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained in line with AS/NZS 1715 on the use

and maintenance of repiratory protective devices

Recommended Filter type: Acid gases filter (or AUS/NZ equivalent)

When RPE is used a face piece Fit Test should be conducted

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls No information available.

Section 9 - Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance Clear Physical State Liquid

Odor No information available
Odor Threshold No data available

pH No information available <1

AUS-000703 Version 1 04-Jul-2020 Page 4/9

SAFETY DATA SHEET

Method - No information available

Liquid

Liquid

Melting Point/Range No data available **Softening Point** No data available

Boiling Point/Range No information available Flash Point No information available

No data available **Evaporation Rate** Flammability (solid,gas) Not applicable

No data available **Explosion Limits**

<=1100 hPa @ 50 °C **Vapor Pressure**

Vapor Density No data available (Air = 1.0)Specific Gravity / Density No data available

Bulk Density Not applicable Water Solubility Miscible

Solubility in other solvents No information available

Partition Coefficient (n-octanol/water) log Pow Component Nitric acid -2.3

Autoignition Temperature No data available No data available **Decomposition Temperature Viscosity** No data available **Explosive Properties** No information available No information available **Oxidizing Properties**

Other information

Molecular Formula Na2 CO3 in 5% HN O3

Section 10 - Stability and Reactivity

None known, based on information available Reactivity

Stability Stable under normal conditions.

Conditions to Avoid Heat, flames and sparks.

Incompatible Materials Strong bases.

Hazardous Decomposition Products Carbon monoxide (CO). Carbon dioxide (CO2). Nitrogen oxides (NOx). Sodium oxides.

Hazardous Polymerization No information available.

Section 11 - Toxicological Information

Information on Toxicological Effects

Product Information (a) acute toxicity;

> Based on available data, the classification criteria are not met Oral **Dermal** Based on available data, the classification criteria are not met Based on available data, the classification criteria are not met Inhalation

Toxicology data for the components

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Water	-	-	-
Nitric acid			LC50 = 2500 ppm. (Rat) 1h
Sodium carbonate	2800 mg/kg (Rat)	> 2000 mg/kg (rabbit)	2.3 mg/l 2h (Rat)

Category 1 B (b) skin corrosion/irritation;

AUS-000703 Version 1 04-Jul-2020 Page 5/9 (c) serious eye damage/irritation; Category 1

(d) respiratory or skin sensitization;

Respiratory No data available No data available Skin

No data available (e) germ cell mutagenicity;

(f) carcinogenicity; No data available

There are no known carcinogenic chemicals in this product

(g) reproductive toxicity; No data available (h) STOT-single exposure; No data available (i) STOT-repeated exposure; No data available

No information available. **Target Organs** No data available (j) aspiration hazard;

delayed

Symptoms / effects,both acute and Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation

Section 12 - Ecological Information

Ecotoxicity effects

Component	Freshwater Fish	Water Flea	Freshwater Algae	Microtox
Nitric acid	LC50: = 72 mg/L, 96h (Gambusia affinis)			
Sodium carbonate	Lepomis macrochirus: LC50: 300 mg/L/96h	EC50: = 265 mg/L, 48h (Daphnia magna)	EC50: = 242 mg/L, 120h (Nitzschia)	-
	Gambusia affinis: LC50: 740 mg/L/96h			

Persistence and Degradability

Persistence

Miscible with water, Persistence is unlikely, based on information available.

Bioaccumulative Potential Bioaccumulation is unlikely

Component	log Pow	Bioconcentration factor (BCF)
Nitric acid	-2.3	No data available

Mobility

The product is water soluble, and may spread in water systems. Will likely be mobile in the

environment due to its water solubility Highly mobile in soils

Endocrine Disruptor Information Persistent Organic Pollutant Ozone Depletion Potential

This product does not contain any known or suspected endocrine disruptors

This product does not contain any known or suspected substance This product does not contain any known or suspected substance

Section 13 - Disposal Considerations

Waste from Residues/Unused **Products**

Do not allow into drains or watercourses or dispose of where ground or surface waters may be affected. Wastes, including emptied containers, are controlled wastes and should be disposed of in accordance with all federal, E.P.A., state and local regulations, Assure conformity with all applicable regulations.

Dispose of this container to hazardous or special waste collection point. **Contaminated Packaging**

Other Information Chemical wastes should be disposed through a licensed commercial waste collection

service. Waste codes should be assigned by the user based on the application for which the product was used. Do not empty into drains. Do not flush to sewer. Large amounts will affect pH and harm aquatic organisms.

Section 14 - Transport Information

AUS-000703 Version 1 04-Jul-2020 Page 6/9

IMDG/IMO

UN-No UN3264

Proper Shipping Name Corrosive liquid, acidic, inorganic, n.o.s.

Technical Shipping Name (NITRIC ACID)

Hazard Class 8
Packing Group III

ADG

UN-No UN3264

Proper Shipping Name Corrosive liquid, acidic, inorganic, n.o.s.

Technical Shipping Name (NITRIC ACID)

Hazard Class 8
Packing Group III

Component	Hazchem Code
Nitric acid	2R
7697-37-2 (5)	2P
···	2PE

IATA

UN-No UN3264

Proper Shipping Name Corrosive liquid, acidic, inorganic, n.o.s.

Technical Shipping Name (NITRIC ACID)

Hazard Class 8
Packing Group |||

Environmental hazards No hazards identified

Special Precautions No special precautions required

Additional information None known

Section 15 - Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

International Inventories X = listed

Component	AICS	NZIoC	EINECS	ELINCS	TSCA	DSL	NDSL	PICCS	ENCS	IECSC	KECL
Water	Х	Х	231-791-	=	Х	Х	-	Х	Х	Х	KE-3540
			2								0
Nitric acid	Х	Х	231-714-	-	Χ	Х	-	Χ	Х	Х	KE-2591
			2								1
Sodium carbonate	Х	Х	207-838-	=	Х	Х	-	Х	Х	Х	KE-3138
			8								0

Standard for the Uniform Scheduling of Medicines and

	_ !	• -	_		_
\mathbf{r}	O	ıc	n	n	c

1 0100110						
Component	Standard for the Uniform Scheduling of Medicines and Poisons	Health Surveillance				
Nitric acid	Schedule 5 listed - except its salts and derivatives;in preparations except in preparations containing <=0.5% of Nitric acid Schedule 6 listed - except its salts and derivatives;except when included in Schedule 5, or in preparations containing <=0.5% of Nitric acid					
Sodium carbonate	Schedule 5 listed - being the carbonate, silicate or phosphate salts of sodium or					

AUS-000703 Version 1 04-Jul-2020 Page 7/9

potassium alone or in any combination: in solid orthodontic device cleaning preparations, the pH of which as an in-use aqueous solution is >11.5, in solid automatic dishwashing preparations, the pH of which in a 500 g/L aqueous solution or mixture is 11.5 but <=12.5;in other solid preparations the pH of which in a 10 g/L aqueous solution is >11.5, or in liquid or semi-solid preparations, the pH of which is >11.5, unless: in food additive preparations for domestic use, or in automatic dish washing preparations for domestic use with a pH >12.5:except when separately specified in these Schedules Schedule 5 listed - being the Carbonate, Silicate or Phosphate salts of Sodium or Potassium alone or in any combination: in solid orthodontic device cleaning preparations as an in-use aqueous solution; in solid automatic dishwashing preparations in a 500 g/L aqueous solution or mixture but with pH <=12.5;in other solid preparations in a 10 g/L aqueous solution, or in liquid or semi-solid preparations, unless in food additive preparations for domestic use, or in automatic dish washing preparations for domestic use with a pH >12.5; except when separately specified in these Schedules Schedule 6 listed - being the carbonate, silicate or phosphate salts of sodium or potassium alone or in any combination for non-domestic use: in solid automatic dishwashing preparations, the pH of which in a 500 g/L aqueous solution or mixture is >12.5, or in liquid or semi-solid automatic dishwashing preparations, the pH of which is >12.5

Prohibition or notification/licensing Shown below are details of specific prohibition/notifications or licencing requirements when requirements they apply.

Section 16 - Other Information

Legend

AICS - Australian Inventory of Chemical Substances

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

IECSC - Chinese Inventory of Existing Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

TWA - Time Weighted Average

IARC - International Agency for Research on Cancer

ICAO/IATA - International Civil Aviation Organization/International Air **Transport Association**

MARPOL - International Convention for the Prevention of Pollution from Shins

NZS 5433:2012 - Transport of Dangerous Goods on Land

LD50 - Lethal Dose 50%

EC50 - Effective Concentration 50% WEL - Workplace Exposure Limit **DNEL** - Derived No Effect Level

POW - Partition coefficient Octanol:Water

vPvB - very Persistent, very Bioaccumulative

VOC (volatile organic compound)

NZIoC - New Zealand Inventory of Chemicals

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japanese Existing and New Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

CAS - Chemical Abstracts Service

ACGIH - American Conference of Governmental Industrial Hygienists Predicted No Effect Concentration (PNEC)

IMO/IMDG - International Maritime Organization/International Maritime Dangerous Goods Code ADG Australian Code for the Transport of Dangerous Goods by Road

and Rail **OECD** - Organisation for Economic Co-operation and Development

LC50 - Lethal Concentration 50%

ATE - Acute Toxicity Estimate

RPE - Respiratory Protective Equipment NOEC - No Observed Effect Concentration

BCF - Bioconcentration factor

PBT - Persistent, Bioaccumulative, Toxic

Key literature references and sources for data

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

AUS-000703 Version 1 04-Jul-2020 Page 8/9

SAFETY DATA SHEET

Physical hazardsOn basis of test dataHealth HazardsCalculation methodEnvironmental hazardsCalculation method

Training Advice

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

Revision Date 04-Jul-2020 Revision Summary 04-Jul-2020 Not applicable.

This safety data sheet complies with the requirements of Safe Work Australia WHS Regulation

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of Safety Data Sheet

AUS-000703 Version 1 04-Jul-2020 Page 9/9