

This safety data sheet was created pursuant to the requirements of: WHS Regulations

Revision date 24-Jul-2024 Revision Number 1.01

## Section 1: Identification: Product identifier and chemical identity

Product identifier

Product Name Sodium Standard: 10000 µg/mL Na in 5% HNO3 [100ml bottle]

Product Code(s) 5190-8454

Other means of identification

Proper shipping name Nitric acid mixture

Chemical name

Pure substance/mixture Mixture

Recommended use of the chemical and restrictions on use

Recommended use Reagents and Standards for Analytical Chemical Laboratory Use.

**Uses advised against** No information available.

Chemicals of Security Concern

This product contains one or more substance(s) listed on the voluntary National Code of

Practice for Chemicals of Security Concern.

Details of manufacturer or importer

**Supplier** 

Agilent Technologies Australia Pty Ltd 679 Springvale Road Mulgrave Victoria 3170, Australia

1800 802 402

For further information, please contact

Contact Point Product Safety Department

E-mail address pdl-msds\_author@agilent.com

Emergency telephone number

Emergency telephone number CHEMTREC®: +(61)-290372994

## Section 2: Hazard(s) identification

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#### GHS Classification

Corrosive to metals	Category 1
Skin corrosion/irritation	Category 1 Sub-category A
Serious eye damage/eye irritation	Category 1

#### Label elements

Corrosion



Signal word DANGER

#### **Hazard statements**

May be corrosive to metals.

Causes severe skin burns and eye damage.

### **Precautionary Statements - Prevention**

Do not breathe dust/fume/gas/mist/vapours/spray.

Wash face, hands and any exposed skin thoroughly after handling.

Wear protective gloves/clothing and eye/face protection.

Keep only in original packaging.

## **Precautionary Statements - Response**

Immediately call a POISONS INFORMATION CENTRE or doctor.

Immediately call a POISONS INFORMATION CENTRE or doctor.

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

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

Wash contaminated clothing before re-use.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Immediately call a POISONS INFORMATION CENTRE or doctor.

IF SWALLOWED: Rinse mouth. DO NOT induce vomiting.

Absorb spillage to prevent material damage.

#### **Precautionary Statements - Storage**

Store in corrosion resistant container with a resistant inner liner.

### **Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant.

#### Other hazards which do not result in classification

No information available.

# Section 3: Composition/information on ingredients

Chemical name	CAS No.	Weight-%

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Nitric Acid	7697-37-2	0 - 10%
Sodium carbonate	497-19-8	0 - 10%
Non-hazardous ingredients	Proprietary	Balance

#### Additional information

The concentration of the acid stated in this SDS is calculated as an absolute mass concentration (%w/v). This is less than the acid concentration stated on the product label and COA, which reflects a percent value of the commercially available concentrated aqueous form of the acid.

## Section 4: First aid measures

#### **Description of first aid measures**

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

required.

**Emergency telephone number** Poisons Information Centre, Australia: 13 11 26

Poisons Information Centre, New Zealand: 0800 764 766

**Inhalation** Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical

attention immediately. 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. If breathing is difficult, (trained personnel should) give oxygen. Delayed pulmonary oedema may occur. Get immediate medical

attention.

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

Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open

while rinsing. Do not rub affected area. Get immediate medical attention.

**Skin contact**Wash off immediately with soap and plenty of water while removing all contaminated clothes

and shoes. Get immediate medical attention.

Ingestion Rinse mouth. Never give anything by mouth to an unconscious person. Do NOT induce

vomiting. Get immediate medical attention.

**Self-protection of the first aider** Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid direct contact with skin. Use

barrier to give mouth-to-mouth resuscitation.

Most important symptoms and effects, both acute and delayed

**Symptoms** Burning sensation.

Indication of any immediate medical attention and special treatment needed

Note to doctors Product is a corrosive material. Use of gastric lavage or emesis is contra-indicated. Possible

perforation of stomach or esophagus should be investigated. Do not give chemical

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antidotes. Asphyxia from glottal oedema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure.

## Section 5: Firefighting measures

Suitable Extinguishing Media

Suitable extinguishing media Use extinguishing measures that are appropriate to local circumstances and the

surrounding environment.

CAUTION: Use of water spray when fighting fire may be inefficient. Large Fire

Unsuitable extinguishing media Do not scatter spilled material with high pressure water streams.

Specific hazards arising from the chemical

Specific hazards arising from the

chemical

The product causes burns of eyes, skin and mucous membranes. Thermal decomposition

can lead to release of irritating gases and vapours.

Special protective actions for firefighters

Special protective equipment and precautions for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Use personal protection equipment.

2R Hazchem code

### Section 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal

protective equipment as required. Attention! Corrosive material. Evacuate personnel to safe

areas. Keep people away from and upwind of spill/leak.

Other information Refer to protective measures listed in Sections 7 and 8.

Use personal protection recommended in Section 8. For emergency responders

Environmental precautions

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Should not be released into the

environment. Do not allow to enter into soil/subsoil. Prevent product from entering drains.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Precautions to prevent secondary hazards

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Prevention of secondary hazards

Clean contaminated objects and areas thoroughly observing environmental regulations.

## Section 7: Handling and storage, including how the chemical may be safely used

#### Precautions for safe handling

Advice on safe handling

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before re-use.

General hygiene considerations

Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Wash hands before breaks and after work. Wear suitable gloves and eye/face protection. Regular cleaning of equipment, work area and clothing is recommended. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing should not be allowed out of the workplace. Wash hands before breaks and immediately after handling the product.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** 

Please refer to the manufacturer's certificate for specific storage and transport temperature conditions. Store only in the original receptacle unless other advice is given on the CoA. Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from moisture. Store locked up. Keep out of the reach of children. Store away from other materials.

Incompatible materials

Oxidising agent. Acids. Bases.

## Section 8: Exposure controls and personal protection

### Control parameters

### **Exposure Limits**

Chemical name	Australia	New Zealand	ACGIH TLV
Nitric Acid	TWA: 2 ppm	TWA: 2 ppm	TWA: 2 ppm
7697-37-2	TWA: 5.2 mg/m <sup>3</sup>	TWA: 5.2 mg/m <sup>3</sup>	STEL: 4 ppm
	STEL: 4 ppm	STEL: 4 ppm	
	STEL: 10 mg/m <sup>3</sup>	STEL: 10 mg/m <sup>3</sup>	

Chemical name	European Union	United Kingdom	Germany DFG
Nitric Acid	-	STEL: 1 ppm	-
7697-37-2		STEL: 2.6 mg/m <sup>3</sup>	

Biological occupational exposure limits

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

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#### Appropriate engineering controls

Engineering controls Showers

Eyewash stations Ventilation systems.

### Individual protection measures, such as personal protective equipment

**Eye/face protection** Avoid contact with eyes. Wear safety glasses with side shields (or goggles). Tight sealing

safety goggles. Face protection shield.

**Skin and body protection** Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron.

Hand protection Wear protective Neoprene™ gloves. The protective gloves to be used must comply with the

specifications of EC Directive 89/686/EEC and the related standard EN374. Wear suitable

gloves. Impervious gloves.

**Respiratory protection** Appropriate respiratory protection should be selected and used according to the chemical

nature, hazards and use of this product and safety requirements of the local jurisdiction. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be

required.

**Environmental exposure controls** Do not allow into any sewer, on the ground or into any body of water.

Thermal hazards No information available.

### Section 9: Physical and chemical properties

#### Information on basic physical and chemical properties

Physical stateLiquidAppearanceLiquidColourcolourlessOdourOdourless.

Odour threshold No information available

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

No data available None known рΗ Melting point / freezing point No data available None known Initial boiling point and boiling rangeNo data available None known Flash point No data available None known **Evaporation rate** No data available None known No data available **Flammability** None known Flammability Limit in Air None known

Upper flammability or explosive No data available

limits

Lower flammability or explosive No data available

limits

Vapour pressure No data available None known

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Relative vapour density No data available None known No data available Relative density None known No data available Water solubility None known Solubility(ies) No data available None known No data available Partition coefficient None known No data available None known **Auto-ignition temperature Decomposition temperature** No data available None known Kinematic viscosity No data available None known **Dynamic viscosity** No data available None known

Other information

VOC content No information available Particle characteristics No information available

## Section 10: Stability and reactivity

Reactivity

**Reactivity** No information available.

Chemical stability

**Stability** Stable under normal conditions.

**Explosion data** 

Sensitivity to mechanical impact None. Sensitivity to static discharge None.

Possibility of hazardous reactions

Possibility of hazardous reactions 
None under normal processing.

Conditions to avoid

**Conditions to avoid** Exposure to air or moisture over prolonged periods.

Incompatible materials

**Incompatible materials** Oxidising agent. Acids. Bases.

Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

### Section 11: Toxicological information

Information on likely routes of exposure

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#### **Product Information**

**Inhalation** Specific test data for the substance or mixture is not available. Corrosive by inhalation.

(based on components). Inhalation of corrosive fumes/gases may cause coughing, choking, headache, dizziness, and weakness for several hours. Pulmonary oedema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate. Inhaled corrosive substances can lead to a toxic oedema of the lungs.

Pulmonary oedema can be fatal.

**Eye contact** Specific test data for the substance or mixture is not available. Causes serious eye damage.

(based on components). Corrosive to the eyes and may cause severe damage including

blindness. May cause irreversible damage to eyes.

**Skin contact** Specific test data for the substance or mixture is not available. Corrosive. (based on

components). Causes burns.

**Ingestion** Specific test data for the substance or mixture is not available. Causes burns. (based on

components). Ingestion causes burns of the upper digestive and respiratory tracts. May cause severe burning pain in the mouth and stomach with vomiting and diarrhoea of dark blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around the mouth. Swelling of the throat may cause shortness of breath and choking. May cause lung

damage if swallowed. May be fatal if swallowed and enters airways.

Symptoms Redness. Burning. May cause blindness. Coughing and/or wheezing.

Acute toxicity .

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document

 ATEmix (oral)
 99,999.00 mg/kg

 ATEmix (dermal)
 99,999.00 mg/kg

 ATEmix (inhalation-gas)
 99,999.00 ppm

 ATEmix (inhalation-vapour)
 44.20 mg/l

 ATEmix (inhalation-dust/mist)
 115.00 mg/l

**Component Information** 

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Nitric Acid	-	-	= 2500 ppm (Rat) 1 h
			ATE (vapours) = 2.65 mg/L
Sodium carbonate	= 4090 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	= 2300 mg/m <sup>3</sup> (Rat) 2 h

See section 16 for terms and abbreviations

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Classification based on data available for ingredients. Causes severe skin burns and eye

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damage.

Serious eye damage/eye irritation Classification based on data available for ingredients. Causes serious eye damage. Causes

burns.

**Respiratory or skin sensitisation** No information available.

Germ cell mutagenicity No information available.

**Carcinogenicity** No information available.

**Reproductive toxicity** No information available.

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available.

**Aspiration hazard** No information available.

# **Section 12: Ecological information**

#### **Ecotoxicity**

## Aquatic ecotoxicity

**Unknown aquatic toxicity** 0 % of the mixture consists of component(s) of unknown hazards to the aquatic environment.

Chemical name	Algae/aquatic plants	Fish	Toxicity to	Crustacea
			microorganisms	
Sodium carbonate	-	LC50: =300mg/L (96h, Lepomis macrochirus) LC50: 310 - 1220mg/L (96h, Pimephales promelas)	<u>-</u>	EC50: =265mg/L (48h, Daphnia magna) LC50: 565 mg/l (48h, crustacean) : 200 mg/l (48h, crustacean)

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**Terrestrial ecotoxicity** There is no data for this product.

Persistence and degradability

Persistence and degradability No information available.

Bioaccumulative potential

**Bioaccumulation** 

**Component Information** 

Chemical name	Partition coefficient
Nitric Acid	-2.3

Mobility

**Mobility** No information available.

Other adverse effects

Other adverse effects No information available.

**Endocrine Disruptor Information**This product does not contain any known or suspected endocrine disruptors.

This product does not contain any known of despected chaecing disraptore.				
Chemical name	EU - REACH (1907/2006) - Article 59(1)	EU - REACH (1907/2006) - Endocrine		
	- Candidate List of Substances of Very	Disruptor Assessment List of		
	High Concern (SVHC) for Authorisation	Substances		
Nitric Acid	-			
Sodium carbonate	-	<del>-</del> .		

# Section 13: Disposal considerations

Disposal methods

Waste from residues/unused

products

Dispose of in accordance with local regulations. Dispose of waste in accordance with

environmental legislation.

**Contaminated packaging** Do not re-use empty containers.

See section 8 for more information

## Section 14: Transport information

ADG

UN number or ID number UN2031

Proper shipping name Nitric acid mixture

Transport hazard class(es)

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Packing group

**Description** UN2031, Nitric acid mixture, 8, II

Limited quantity (LQ) 1 L Hazchem code 2R

<u>IATA</u>

UN number or ID number UN2031

UN proper shipping name Nitric acid mixture

Transport hazard class(es) 8
Packing group || ERG Code 8L

**Description** UN2031, Nitric acid mixture, 8, II

**IMDG** 

UN number or ID number UN2031

UN proper shipping name Nitric acid mixture

Transport hazard class(es) 8
Packing group II
EmS-No. F-A, S-B
Marine pollutant NP

**Description** UN2031, Nitric acid mixture, 8, II

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

No information available

## Section 15: Regulatory information

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

National regulations

Australia

See section 8 for national exposure control parameters

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)

Classified as a scheduled poison according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)

Poison Schedule Number 5

### **Australian Industrial Chemicals Introduction Scheme (AICIS)**

	Australian Industrial Chemicals Introduction Scheme (AICIS)	Additional information
Nitric Acid - 7697-37-2	Contact supplier for	-

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	Australian Industrial Chemicals Introduction Scheme (AICIS)	Additional information
	inventory compliance status Present	
Sodium carbonate - 497-19-8	Present	-

#### **Illicit Drug Precursors/Reagents**

This product does not contain any substance(s) on the Illicit Drug Precursors/Reagents list.

#### **Chemicals of Security Concern**

This product contains one or more substance(s) listed on the voluntary National Code of Practice for Chemicals of Security Concern.

Chemical name	Chemicals of Security Concern	Additional information
Nitric Acid - 7697-37-2	Present	Precursors to homemade explosives
	High risk	·

#### National pollutant inventory

Subject to reporting requirement

<u> </u>	
Chemical name	National pollutant inventory
Nitric Acid - 7697-37-2	10 tonne/yr Threshold category 1

### **International Inventories**

AllC Contact supplier for inventory compliance status.

NZIOC Contact supplier for inventory compliance status.

TSCA LGC, to the best of its ability, has confirmed that the chemical substances in this product are

listed as "Active" in the EPA (Environmental Protection Agency) "TSCA Inventory Notification (Active-Inactive) Requirements Rule" ("the Final Rule") of Feb 2019, as

amended Feb 2021.".

DSL/NDSL Contact supplier for inventory compliance status.
EINECS/ELINCS Contact supplier for inventory compliance status.
ENCS Contact supplier for inventory compliance status.
IECSC Contact supplier for inventory compliance status.
KECI Contact supplier for inventory compliance status.
PICCS Contact supplier for inventory compliance status.

### Legend:

AICS - Australian Inventory of Chemical Substances

**NZIoC** - New Zealand Inventory of Chemicals

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

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

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**ENCS** - Japan Existing and New Chemical Substances **IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

### **International Regulations**

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

## Section 16: Any other relevant information

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**Revision Note** 

The symbol (\*) in the margin of this SDS indicates that this line has been revised.

#### Key or legend to abbreviations and acronyms used in the safety data sheet

### Legend

SVHC: Substances of Very High Concern for Authorisation:
PBT: Persistent, Bioaccumulative, and Toxic (PBT) Substances
vPvB: Very Persistent and very Bioaccumulative (vPvB) Substances

STOT: Specific Target Organ Toxicity

ATE: Acute Toxicity Estimate LC50: 50% Lethal Concentration

LD50: 50% Lethal Dose

### Legend Section 8: Exposure controls/personal protection

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

Ceiling Maximum limit value Sk\* Skin designation

C Carcinogen

### Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR) U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA) EPA (Environmental Protection Agency)

Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

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National Institute of Technology and Evaluation (NITE)
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
Australian Industrial Chemicals Introduction Scheme (AICIS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Library of Medicine's PubMed database (NLM PUBMED)
National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications
Organisation for Economic Co-operation and Development High Production Volume Chemicals Program
Organisation for Economic Co-operation and Development Screening Information Data Set
World Health Organization

#### **Disclaimer**

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**End of Safety Data Sheet** 

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