

SAFETY DATA SHEET

Issue Date 28-Sep-2016 Revision Date 21-Feb-2018 Version 4

Section 1: Identification: Product identifier and chemical identity

Product identifier

Product Name Acid Reagent 104299 Product Code(s)

Other means of identification

Safety data sheet number M00025

Recommended use of the chemical and restrictions on use

Recommended Use Silica determination.

Uses advised against No information available

Details of manufacturer or importer

Manufacturer

Ecolab Pty Ltd. 2 Drake Ave Macquarie Park, NSW 2133 Phone 1800 022 002

HACH Pacific 26 Brindley Street Dandenong South, 3175 AU Tel: 1300 887 735

Emergency telephone number

13 11 26

Section 2: Hazard(s) identification

GHS Classification

Corrosive to metals	Category 1 - (H290)
Acute toxicity - Oral	Category 4 - (H302)
Skin corrosion/irritation	Category 2 - (H315)
Serious eye damage/eye irritation	Category 2A - (H319)
Chronic aquatic toxicity	Category 3 - (H412)

Label elements

Corrosion **Exclamation mark**



Signal word - Warning

Page 1/13 EN / UGHS



Distributed by:

Tel: +612 87065400 www.watertestsystems.com.au

Hazard statements

H290 - May be corrosive to metals

H302 - Harmful if swallowed

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H412 - Harmful to aquatic life with long lasting effects

EU Specific Hazard Statements

Not applicable

Precautionary statements

P270 - Do not eat, drink or smoke when using this product

P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

P330 - Rinse mouth

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

P332 + P313 - If skin irritation occurs: Get medical advice/attention

P362 - Take off contaminated clothing and wash before reuse

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

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

P337 + P313 - If eye irritation persists: Get medical advice/attention

P273 - Avoid release to the environment

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

P234 - Keep only in original container

P390 - Absorb spillage to prevent material damage

Other hazards

Harmful to aquatic life

No information available

Section 3: Composition and information on ingredients, in accordance with Schedule 8

Chemical Family Mixture

Substance

Not applicable

Mixture

Chemical name	Formula	CAS No.	EC No.	Percent Range
Sulfamic acid	H ₃ NO ₃ S	5329-14-6	226-218-8	80 - 90%
Sodium chloride	NaCl	7647-14-5	231-598-3	20 - 30%

Section 4: FIRST AID MEASURES

Emergency telephone number

Poisons Information Center, Australia: 13 11 26

Poisons Information Center, New Zealand: 0800 764 766

Description of necessary first aid measures

General advice Show this safety data sheet to the doctor in attendance.

Inhalation Remove to fresh air. Get medical attention immediately if symptoms occur.

Skin contact Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical

attention if irritation develops and persists.

EN / UGHS Page 2/13

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 medical attention if irritation develops and

persists.

Ingestion Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth

to an unconscious person. Do NOT induce vomiting. Call a physician.

For emergency responders

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

Most important symptoms/effects, acute and delayed Symptoms

Burning sensation.

Indication of immediate medical attention and special treatment needed, if necessary

Section 5: Firefighting measures

Suitable Extinguishing Media

surrounding environment.

Unsuitable Extinguishing Media No information available

Specific hazards arising from the chemical

Specific hazards arising from the No information available.

chemical

Flammable properties

During a fire, irritating and highly toxic gases may be generated by thermal decomposition.

Explosive properties

Not classified according to GHS criteria.

Hazardous combustion products This material will not burn.

Specific/special fire-fighting measures

Specific/special fire-fightingNo information available.

measures

Special protective equipment and precautions for fire-fighters

Special protective equipment for Firefighters should wear self-contained breathing apparatus and full firefighting turnout

fire-fighters gear. Use personal protection equipment.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

personnel to safe areas. Keep people away from and upwind of spill/leak. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment

as required.

Sections 7 and 8.

For emergency responders

Use personal protection recommended in Section 8.

EN / UGHS Page 3/13

Environmental precautions

Prevent entry into waterways, sewers, basements or confined areas. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Prevent further leakage or spillage if safe to do so.

Methods and material for containment and cleaning up

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

Methods for cleaning up

Use personal protective equipment as required. Cover powder spill with plastic sheet or tarp

to minimize spreading and keep powder dry. Take up mechanically, placing in appropriate containers for disposal. Avoid creating dust. Clean contaminated surface thoroughly. Dam

up. After cleaning, flush away traces with water.

Precautions to prevent secondary hazards

Clean contaminated objects and areas thoroughly observing environmental regulations. See section 8 for more information. See section 13 for more information.

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

Preventive measures for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with

skin, eyes or clothing. Do not eat, drink or smoke when using this product. Take off

contaminated clothing and wash before reuse.

Precautions for safe handling

General Hygiene Considerations Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this

product. Regular cleaning of equipment, work area and clothing is recommended. Avoid

contact with skin, eyes or clothing.

Conditions for safe storage, including any incompatibilities

Storage Conditions 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 Oxidizing agent. Strong acids. Strong bases.

Section 8: Exposure controls and personal protection

Control parameters

Exposure Limits This product, as supplied, does not contain any hazardous materials with occupational

exposure limits established by the region specific regulatory bodies.

Legend See section 16 for terms and abbreviations

Appropriate engineering controls

Engineering Controls Showers

Eyewash stations

Ventilation systems.

Individual protection measures, such as personal protective equipment

exceeded or irritation is experienced, ventilation and evacuation may be required.

Hand Protection Wear suitable gloves. Impervious gloves.

EN / UGHS Page 4/13

Eye/face protection If splashes are likely to occur, wear safety glasses with side-shields.

Skin and body protection Wear suitable protective clothing. Long sleeved clothing.

General Hygiene Considerations Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this

product. Regular cleaning of equipment, work area and clothing is recommended. Avoid

contact with skin, eyes or clothing.

Environmental exposure controls Local authorities should be advised if significant spillages cannot be contained. Do not

allow into any sewer, on the ground or into any body of water.

Thermal hazards None under normal processing.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state

Solid

Appearance crystalline Odor Odorless

Color white

Odor threshold No data available

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

Molecular weight No data available

pH Not applicable

Melting point/freezing point ~ 205 °C / 401 °F Estimation based on theoretical

calculation

Boiling point / boiling range No data available

Evaporation rateNot applicableVapor pressureNot applicable

Vapor density (air = 1) Not applicable

Specific gravity (water = 1 / air = 1) 2.00

Partition Coefficient (n-octanol/water) log K_{ow} < 0.1

Soil Organic Carbon-Water Partition

Coefficient

 $log K_{oc} < 0.7$

Autoignition temperature No data available

Decomposition temperatureNo data available

Dynamic viscosity Not applicable

Kinematic viscosity Not applicable

Solubility(ies)

Water solubility

Water solubility classification	<u>Water solubility classification</u> <u>Water solubility</u> <u>Water Solubility</u>	
Soluble	> 1000 mg/L	25 °C / 77 °F

Solubility in other solvents

Chemical Name	Solubility classification	Solubility	Solubility Temperature

EN / UGHS Page 5/13

Acid	Soluble	> 1000 mg/L	25 °C / 77 °F

Other Information

Metal Corrosivity

Classified as corrosive to metal according to GHS criteria

Steel Corrosion Rate
Aluminum Corrosion Rate
Not applicable
Not applicable

Volatile Organic Compounds (VOC) Content

Not applicable

Chemical name	CAS No.	Volatile organic compounds (VOC) content	CAA (Clean Air Act)
Sulfamic acid	5329-14-6	No data available	-
Sodium chloride	7647-14-5	No data available	-

Explosive properties

Upper explosion limitNo data availableLower explosion limitNo data available

Flammable properties

Flash point Not applicable

Method No information available

Flammability Limit in Air

Upper flammability limit:
Lower flammability limit:
No data available
No data available

Oxidizing properties
No data available.

Bulk density

No data available

Particle Size No information available

Particle Size Distribution No information available

Section 10: STABILITY AND REACTIVITY

Reactivity

Not applicable.

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.

Hazardous polymerization

None under normal processing.

Conditions to avoid

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

Revision Date 21-Feb-2018 104299 - Acid Reagent

Incompatible materials

Oxidizing agent. Strong acids. Strong bases. Incompatible materials

Hazardous Decomposition Products

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Section 11: TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Product Information

Inhalation May cause irritation of respiratory tract.

Eye contact Causes serious eye irritation.

Skin contact Causes skin irritation.

Ingestion Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Harmful if

swallowed.

Symptoms Redness. May cause redness and tearing of the eyes.

Aggravated Medical Conditions Skin disorders. Eye disorders.

Toxicologically synergistic

None known.

products

Toxicokinetics, metabolism and No information available.

distribution

Product Acute Toxicity Data

Oral Exposure Route No data available **Dermal Exposure Route** No data available Inhalation (Dust/Mist) Exposure Route No data available Inhalation (Vapor) Exposure Route No data available Inhalation (Gas) Exposure Route No data available

Unknown Acute Toxicity

0 % of the mixture consists of ingredient(s) of unknown toxicity.

type

Guinea pig

Acute Toxicity Estimations (ATE)

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

dose

1050 mg/kg

ATEmix (oral)	1,617.00 mg/kg
ATEmix (dermal)	No information available
ATEmix (inhalation-dust/mist)	No information available
ATEmix (inhalation-vapor)	No information available
ATEmix (inhalation-gas)	No information available

If available, see data below

None reported

sources for data

IUCLID (The International

Ingredient Acute Toxicity Data

Oral Exposure Route

Sulfamic acid

Chemical name Endpoint Reported **Exposure Toxicological effects** Key literature references and time type dose sources for data IUCLID (The International Sulfamic acid Rat 1450 mg/kg None None reported Uniform Chemical Information (80 - 90%)LD50 reported CAS#: 5329-14-6 Database) **IUCLID** (The International Sodium chloride Rat 3000 mg/kg None reported None **Uniform Chemical Information** (20 - 30%)LD50 reported CAS#: 7647-14-5 Database) Key literature references and Chemical name **Endpoint** Reported **Exposure Toxicological effects**

time

None

Page 7/13 EN / UGHS

(80 - 90%) CAS#: 5329-14-6	LD ₅₀	reported		Uniform Chemical Information Database)
Dermal Exposure Ro	ute	,	If available, see data below	

If available, see data below Inhalation (Dust/Mist) Exposure Route
Inhalation (Vapor) Exposure Route
Inhalation (Gas) Exposure Route
If available, see data below If available, see data below Inhalation (Gas) Exposure Route
If available, see data below If available, see data below

Product Specific Target Organ Toxicity Single Exposure

Data

Oral Exposure RouteNo data availableDermal Exposure RouteNo data availableInhalation (Dust/Mist) Exposure RouteNo data availableInhalation (Vapor) Exposure RouteNo data availableInhalation (Gas) Exposure RouteNo data available

Ingredient Specific Target Organ Toxicity Single Exposure Data

Oral Exposure Route
Dermal Exposure Route
Inhalation (Dust/Mist) Exposure Route
Inhalation (Vapor) Exposure Route
Inhalation (Gas) Exposure Route
If available, see data below

Aspiration toxicity

If available, see data below

Kinematic viscosity

Not applicable

Product Skin Corrosion/Irritation Data

No data available.

Ingredient Skin Corrosion/Irritation Data

If available, see data below

Chemical name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Sulfamic acid (80 - 90%) CAS#: 5329-14-6	Standard Draize Test	Human	40 mg	5 days	Mild skin irritant	RTECS (Registry of Toxic Effects of Chemical Substances)
Sodium chloride (20 - 30%) CAS#: 7647-14-5	Standard Draize Test	Rabbit	500 mg	24 hours	Mild skin irritant	RTECS (Registry of Toxic Effects of Chemical Substances)

Product Serious Eye Damage/Eye Irritation Data

No data available.

Ingredient Eye Damage/Eye Irritation Data

If available, see data below

Chemical name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Sulfamic acid (80 - 90%) CAS#: 5329-14-6	Standard Draize Test	Rabbit	20 mg	None reported	Eye irritant	RTECS (Registry of Toxic Effects of Chemical Substances)
Sodium chloride	Standard Draize	Rabbit	100 mg	None	Mild eye irritant	RTECS (Registry of
(20 - 30%)	Test		J	reported	,	Toxic Effects of
CAS#: 7647-14-5						Chemical Substances

Sensitization Information

Product Sensitization Data

Skin Sensitization Exposure Route

Respiratory Sensitization Exposure Route

No data available.

No data available.

EN / UGHS Page 8/13

Ingredient Sensitization Data

Skin Sensitization Exposure RouteIf available, see data below.Respiratory Sensitization Exposure RouteIf available, see data below.

Chronic Toxicity Information

Product Specific Target Organ Toxicity Repeat Dose Data

Oral Exposure Route

Dermal Exposure Route

Inhalation (Dust/Mist) Exposure Route

Inhalation (Vapor) Exposure Route

Inhalation (Gas) Exposure Route

No data available.

No data available.

No data available.

No data available.

Ingredient Specific Target Organ Toxicity Repeat Exposure Data

Oral Exposure Route

Dermal Exposure Route

If available, see data below

Product Carcinogenicity Data

Oral Exposure RouteNo data availableDermal Exposure RouteNo data availableInhalation (Dust/Mist) Exposure RouteNo data availableInhalation (Vapor) Exposure RouteNo data availableInhalation (Gas) Exposure RouteNo data available

Ingredient Carcinogenicity Data

Chemical name	CAS No.	ACGIH	IARC	NTP	OSHA
Sulfamic acid	5329-14-6	-	-	-	-
Sodium chloride	7647-14-5	-	-	-	-

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)	Does not apply
IARC (International Agency for Research on Cancer)	Does not apply
NTP (National Toxicology Program)	Does not apply
OSHA (Occupational Safety and Health Administration of the US Department of	Does not apply
Labor)	

Oral Exposure Route
Dermal Exposure Route
If available, see data below
Inhalation (Dust/Mist) Exposure Route
Inhalation (Vapor) Exposure Route
Inhalation (Gas) Exposure Route
If available, see data below

Product Germ Cell Mutagenicity invitro Data

No data available.

Ingredient Germ Cell Mutagenicity invitro Data

No data available

Product Germ Cell Mutagenicity invivo Data

Oral Exposure RouteNo data availableDermal Exposure RouteNo data availableInhalation (Dust/Mist) Exposure RouteNo data availableInhalation (Vapor) Exposure RouteNo data availableInhalation (Gas) Exposure RouteNo data available

Ingredient Germ Cell Mutagenicity invivo Data

Oral Exposure Route

If available, see data below

Dermal Exposure Route

If available, see data below

If available, see data below

EN / UGHS Page 9/13

Inhalation (Dust/Mist) Exposure RouteIf available, see data belowInhalation (Vapor) Exposure RouteIf available, see data belowInhalation (Gas) Exposure RouteIf available, see data below

Product Reproductive Toxicity Data

Oral Exposure Route

Dermal Exposure Route

Inhalation (Dust/Mist) Exposure Route

Inhalation (Vapor) Exposure Route

Inhalation (Gas) Exposure Route

No data available

No data available

No data available

No data available

Ingredient Reproductive Toxicity Data

Oral Exposure Route
Inhalation (Dust/Mist) Exposure Route
Inhalation (Vapor) Exposure Route
Inhalation (Gas) Exposure Route
If available, see data below
Inhalation (Gas) Exposure Route
If available, see data below
If available, see data below

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity Harmful to aquatic life with long lasting effects

Unknown Aquatic Toxicity 0 % of the mixture consists of components(s) of unknown hazards to the aquatic

environment.

Product Ecological Data

Aquatic toxicity

FishNo data availableCrustaceaNo data availableAlgaeNo data available

Ingredient Ecological Data

Aquatic toxicity

Fish If available, see ingredient data below

Chemical name	Exposure	Species	Endpoint	Reported	Key literature references and
	time		type	dose	sources for data
Sulfamic acid	96 hours	Pimephales promelas	LC ₅₀	42.2 mg/L	ERMA (New Zealands
(80 - 90%)					Environmental Risk Management
CAS#: 5329-14-6					Authority)
Sodium chloride	96 hours	Lepomis macrochirus	LC ₅₀	5840 mg/L	IUCLID (The International
(20 - 30%)					Uniform Chemical Information
CAS#: 7647-14-5					Database)

Crustacea If available, see ingredient data below **Chemical name Exposure Endpoint** Reported Key literature references and **Species** time dose sources for data type **IUCLID** (The International Sodium chloride 48 Hours Daphnia magna 1661 mg/L EC50 **Uniform Chemical Information** (20 - 30%)CAS#: 7647-14-5 Database)

Algae No data available

Other Information

Persistence and degradability

Product Biodegradability Data

No data available.

Ingredient Biodegradability Data

EN / UGHS Page 10 / 13

Bioaccumulation

Product Bioaccumulation Data

No data available.

Partition Coefficient (n-octanol/water) log K_{ow} < 0.1

Ingredient Bioaccumulation Data

Mobility

Soil Organic Carbon-Water Partition Coefficient $\log K_{oc} < 0.7$

Water solubility

Water solubility classification	<u>Water solubility</u>	Water Solubility Temperature
Soluble	> 1000 mg/L	25 °C / 77 °F

Other adverse effects

No information available.

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 reuse empty containers.

Section 14: TRANSPORT INFORMATION

ADG

UN Number UN2967

Proper shipping name Sulphamic Acid Mixture

Hazard Class 8
Packing Group III

<u>IATA</u>

UN/ID no UN2967

Proper shipping name Sulphamic Acid Mixture

Hazard Class 8
Packing Group III
ERG Code 154

IMDG

UN/ID no UN2967

Proper shipping name Sulphamic Acid Mixture

Hazard Class 8
Packing Group III

Additional information

There is a possibility that this product could be contained in a reagent set or kit composed of various compatible dangerous goods. If the item is not in a reagent set or kit, the classification given above applies.

If the item is part of a reagent set or kit the classification would change to the following:

UN3316 Chemical Kit, Hazard Class 9, Packing Group II or III.

If the item is not regulated, the Chemical Kit classification does not apply.

EN / UGHS Page 11 / 13

Section 15: REGULATORY INFORMATION

Regulatory information

National regulations

Australia

Model Work Health and Safety Regulations

[NOHSC:2011(2003] National Code of Practice for the Preparation of Material Safety Data Sheets

Labelling of Workplace Hazardous Chemicals Code of Practice

See section 8 for national exposure control parameters

National pollutant inventory

Not subject to reporting

Banned and/or restricted

No Products Listed.

International Inventories

TSCA Complies **DSL/NDSL** Complies **EINECS/ELINCS** Complies **ENCS** Complies Complies **IECSC** Complies **KECL** Complies **PICCS** Complies TCSI Complies **AICS** Complies **NZIoC**

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

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

TCSI - Taiwan Chemical Substances Inventory

AICS - Australian Inventory of Chemical Substances

NZIoC - New Zealand Inventory of Chemicals

International Regulations

Ozone-depleting substances (ODS) Not applicable

Persistent Organic Pollutants Not applicable

Export Notification requirements Not applicable

Section 16: Any other relevant information

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

NIOSH IDLH Immediately Dangerous to Life or Health

ACGIH ACGIH (American Conference of Governmental Industrial Hygienists)

NDF no data

Legend - Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

EN / UGHS Page 12 / 13

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

Ceiling Ceiling Limit Value MAC Maximum Allowable Concentration

X Listed Vacated These values have no official status. The only

binding levels of contaminants are those listed in the final OSHA PEL. These lists are for reference purposes only. Please note that some reference state regulations of these "liberated" exposure limits in their state

regulations.

SKN* Skin designation SKN+ Skin sensitization
RSP+ Respiratory sensitization ** Hazard Designation
C Carcinogen R Reproductive toxicant

M mutagen

Prepared By Hach Product Compliance Department

 Issue Date
 28-Sep-2016

 Revision Date
 21-Feb-2018

Revision Note

None

Reference Sources for Section 11

See Section 11: TOXICOLOGICAL INFORMATION

Disclaimer

USER RESPONSIBILITY: Each user should read and understand this information and incorporate it in individual site safety programs in accordance with applicable hazard communication standards and regulations.

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED TO BE ACCURATE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF.

HACH COMPANY©2018

End of Safety Data Sheet

EN / UGHS Page 13 / 13