

SECTION 1: Identification

1.1. Product identifier

Product form	: Substance
Trade name	: Sulphamic Acid
EC-No.	: 226-218-8
CAS-No.	: 5329-14-6
UN-No. (ADR)	: 2967
Formula	: H3NO3S

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture	:
Recommended uses and restrictions	: For laboratory use only

1.3. Supplier's details

Distributor

Rolfes Chemicals Pty Ltd
Cnr Brammer and strachan street
P.O. Box 14075, Wadeville
1422 Germiston JHB – South Africa Gauteng
South Africa
T +27 11 873 0157

1.4. Emergency telephone number

Emergency number	: 0861114753
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to the United Nations GHS

Skin corrosion/irritation, Category 1	H314
Serious eye damage/eye irritation, Category 1	H318
Hazardous to the aquatic environment – Chronic Hazard, Category 3	H412
Full text of H-statements: see section 16	

2.2. Label elements

Labelling according to the United Nations GHS

Hazard pictograms (GHS ZA)



Signal word (GHS-ZA)

: Danger

Hazard statements (GHS ZA)

: H314 - Causes severe skin burns and eye damage
H412 - Harmful to aquatic life with long lasting effects

Precautionary statements (GHS ZA)

: P260 - Do not breathe dusts or mists.
P264 - Wash hands, forearms and face thoroughly after handling.
P273 - Avoid release to the environment.
P280 - Wear eye protection, protective clothing.
P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P354+P338 - IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P316 - Get emergency medical help immediately.
P317 - Get medical help.

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P321 - Specific treatment (see supplemental first aid instruction, specific cleansing agent(s), ANTIDOTE on this label).
P363 - Wash contaminated clothing before reuse.
P405 - Store locked up.
P501 - Dispose of contents and container to an approved waste disposal plant.

2.3. Other hazards

Adverse physicochemical, human health and environmental effects : Causes severe skin burns and eye damage, Causes serious eye damage.

SECTION 3: Composition/information on ingredients

3.1. Substances

Name : Sulphamic Acid
CAS-No. : 5329-14-6
EC-No. : 226-218-8
Product identifiers: See section 1.1

Name	Product identifier	%	Classification according to the United Nations GHS
Sulphamic acid	CAS-No.: 5329-14-6	≥ 99,5	Skin Irrit. 2, H315 Eye Irrit. 2, H319

Full text of H-statements: see section 16

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Call a physician immediately.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact : Rinse skin with water/shower. Take off immediately all contaminated clothing. Call a physician immediately.
First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
First-aid measures after ingestion : Rinse mouth. Do not induce vomiting. Call a physician immediately.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after skin contact : Burns.
Symptoms/effects after eye contact : Serious damage to eyes.
Symptoms/effects after ingestion : Burns.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

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5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

No additional information available

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes. Do not breathe dust, fume, gas, mist, spray, vapours.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Mechanically recover the product.
Other information : Dispose of materials or solid residues at an authorized site.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Do not breathe dust, fume, gas, mist, spray, vapours. Wear personal protective equipment.
Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store locked up. Store in a well-ventilated place. Keep cool.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures, such as personal protective equipment (PPE)

Hand protection : Protective gloves
Eye protection : Safety glasses
Skin and body protection : Wear suitable protective clothing
Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment

Personal protective equipment symbol(s):



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8.4. Exposure limit values for the other components

No additional information available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Solid crystalline powder.
Molecular mass	: 97,1 g/mol
Colour	: Colourless. white.
Odour	: odourless.
Odour threshold	: No data available
pH	: 1,2
pH solution	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Relative evaporation rate (ether=1)	: No data available
Melting point	: 205 °C
Freezing point	: Not applicable
Boiling point	: No data available
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: > 250 °C
Flammability	: Non flammable.
Vapour pressure	: 0,008 hPa
Vapour pressure at 50°C	: No data available
Relative vapour density at 20°C	: No data available
Relative density	: 2,15
Relative density of saturated gas/air mixture	: No data available
Density	: 2120 kg/m ³
Relative gas density	: No data available
Solubility	: Water: 18,1 g/100ml
Partition coefficient n-octanol/water (Log Pow)	: 0,1
Partition coefficient n-octanol/water (Log Kow)	: No data available
Viscosity, kinematic	: Not applicable
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: Not applicable
Lower explosion limit	: No data available
Upper explosion limit	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

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10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Sulphamic Acid (5329-14-6)

LD50 oral rat	2065 mg/kg
LD50 dermal rat	> 2000 mg/kg

Sulphamidic acid (5329-14-6)

LD50 oral rat	2140 mg/kg bodyweight Animal: rat, Animal sex: female
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)

Skin corrosion/irritation : Causes severe skin burns.
pH: 1,2
Serious eye damage/irritation : Causes serious eye damage.
pH: 1,2
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : Not classified
STOT-repeated exposure : Not classified
Aspiration hazard : Not classified

Sulphamic Acid (5329-14-6)

Viscosity, kinematic	Not applicable
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Sulphamidic acid (5329-14-6)

Animal studies and expert judgment for classification	False
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SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Before neutralisation, the product may represent a danger to aquatic organisms.
Hazardous to the aquatic environment, short-term (acute) : Not classified
Hazardous to the aquatic environment, long-term (chronic) : Harmful to aquatic life with long lasting effects.

Sulphamic Acid (5329-14-6)

LC50 - Fish [1]	70,3 mg/l
EC50 - Other aquatic organisms [1]	71,6 mg/l
ErC50 algae	48 mg/l
Partition coefficient n-octanol/water (Log Pow)	0,1

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Sulphamidic acid (5329-14-6)	
LC50 - Fish [1]	70,3 mg/l Test organisms (species): Pimephales promelas
EC50 - Crustacea [1]	71,6 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	48 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
EC50 72h - Algae [2]	33,8 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
LOEC (chronic)	34 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	19 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	≥ 60 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio) Duration: '34 d'

12.2. Persistence and degradability

Sulphamic Acid (5329-14-6)	
Persistence and degradability	No additional information available

12.3. Bioaccumulative potential

Sulphamic Acid (5329-14-6)	
Partition coefficient n-octanol/water (Log Pow)	0,1
Bioaccumulative potential	No additional information available

12.4. Mobility in soil

Sulphamic Acid (5329-14-6)	
Mobility in soil	No additional information available
Partition coefficient n-octanol/water (Log Pow)	0,1

12.5. Other adverse effects

Ozone : Not classified
Other adverse effects : No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information




In accordance with SANS / IMDG / IATA

SANS	IMDG	IATA
14.1. UN number		
2967	2967	2967
14.2. Proper Shipping Name		
SULPHAMIC ACID	SULPHAMIC ACID	Sulphamic acid
14.3. Transport hazard class(es)		
8	8	8

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SANS	IMDG	IATA
		
14.4. Packing group		
III	III	III
14.5. Environmental hazards		
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No
No supplementary information available		

14.6. Special precautions for user

SANS

Limited quantities (SANS)	: 5 kg
Limited quantities (SANS)	: 5 kg
Packagings, large packagings and IBCs Packing instructions (SANS)	: P002, IBC08, LP02
Packagings, large packagings and IBCs Special packing instructions (SANS)	: B3
Portable tank and bulk containers instructions (SANS)	: T1
Portable tank and bulk container special provisions (SANS)	: TP33

IMDG

Limited quantities (IMDG)	: 5 kg
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: P002, LP02
IBC packing instructions (IMDG)	: IBC08
IBC special provisions (IMDG)	: B3
Tank instructions (IMDG)	: T1
Tank special provisions (IMDG)	: TP33
EmS-No. (Fire)	: F-A - FIRE SCHEDULE Alfa - GENERAL FIRE SCHEDULE
EmS-No. (Spillage)	: S-B - SPILLAGE SCHEDULE Bravo - CORROSIVE SUBSTANCES
Stowage category (IMDG)	: A
Segregation (IMDG)	: SGG1, SG36, SG49
Properties and observations (IMDG)	: White crystalline powder. Soluble in water. Decomposes when heated, evolving toxic fumes. Causes burns to skin, eyes and mucous membranes.

IATA

PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y845
PCA limited quantity max net quantity (IATA)	: 5kg
PCA packing instructions (IATA)	: 860
PCA max net quantity (IATA)	: 25kg
CAO packing instructions (IATA)	: 864
CAO max net quantity (IATA)	: 100kg
Special provisions (IATA)	: A803
ERG code (IATA)	: 8L

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

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SECTION 15: Regulatory information

15.1. Safety, health, and environmental national regulations specific for the product

No additional information available

SECTION 16: Other information

Issue date : 2024/01/29
Revision date : 2024/01/29

Full text of H-statements

H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H412	Harmful to aquatic life with long lasting effects

Safety Data Sheet (SDS), South Africa

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.