

## Safety Data Sheet **SULFAMIC ACID**

SDS no. 2Q8TE1VE • Version 1.0 • Date of issue: 2024-08-26

### SECTION 1: Identification

#### GHS Product identifier

Product name SULFAMIC ACID

#### Other means of identification

Product Name	Product Code
Sulphamic acid, Amidosulfonic acid, Sulfamidic acid, Sulfaminic acid	
SULFAMIC ACID LR	SL091
SULFAMIC ACID AR	SA091

#### Recommended use of the chemical and restrictions on use

Metal and ceramic cleaning, nitrite removal in azo-dye operations, gas-liberating compositions, organic synthesis, analytical acidimetric standard, amine sulfamates, stabilizing agent for chlorine and hypochlorite in swimming pools, bleaching pulp and textiles, catalyst for urea-formaldehyde resins, sulfonating agent, pH control, hard-water scale removal, electroplating and laboratory reagent.

#### Supplier's details

Name	ChemSupply Australia Pty Ltd
Address	38-50 Bedford Street 5013 Gillman South Australia Australia
Telephone	08 8440 2000
email	www.chemsupply.com.au

#### Emergency phone number

CHEMCALL 1800 127 406 (Australia) / +64-4-917-9888 (International)

### SECTION 2: Hazard identification

#### General hazard statement

Classified as dangerous goods according to the Australian Dangerous Goods Code (ADG).

Classified as Hazardous according to the Globally Harmonised System of classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.

#### Classification of the substance or mixture

#### GHS classification in accordance with: UN GHS revision 7

- Serious eye damage/eye irritation, Cat. 2A
- Skin corrosion/irritation, Cat. 2

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- Hazardous to the aquatic environment, long-term (chronic), Cat. 3

### GHS label elements, including precautionary statements

#### Pictograms



#### Signal word

**Warning**

#### Hazard statement(s)

H315 Causes skin irritation  
H319 Causes serious eye irritation  
H412 Harmful to aquatic life with long lasting effects

#### Precautionary statement(s)

P264 Wash hands thoroughly after handling.  
P273 Avoid release to the environment.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P302+P352 IF ON SKIN: Wash with plenty of water/soap  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P332+P313 If skin irritation occurs: Get medical advice/attention.  
P337+P313 If eye irritation persists: Get medical advice/attention.  
P362+P364 Take off contaminated clothing and wash it before reuse.  
P501 Dispose of contents/container to an approved waste disposal facility

## SECTION 3: Composition/information on ingredients

#### Mixtures

Molecular weight: 97.09

#### Components

Component	CAS no.	Concentration
Sulfamic acid (EC no.: 226-218-8; Index no.: 016-026-00-0) (weight)	5329-14-6	98 - <= 100 %
CLASSIFICATIONS: Serious eye damage/eye irritation, Cat. 2A; Skin corrosion/irritation, Cat. 2; Hazardous to the aquatic environment, long-term (chronic), Cat. 3. HAZARDS: H315 - Causes skin irritation; H319 - Causes serious eye irritation; H412 - Harmful to aquatic life with long lasting effects.		

## SECTION 4: First-aid measures

#### Description of necessary first-aid measures

##### General advice

First Aid Facilities: Maintain eyewash fountain in work area.

##### If inhaled

If inhaled, remove from contaminated area to fresh air immediately. Apply artificial respiration if not breathing. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.

##### In case of skin contact

Immediately remove contaminated clothing and wash affected area with water for at least 15 minutes. Ensure contaminated clothing is washed before re-use. Seek medical advice /attention depending on the severity.

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In case of eye contact

Immediately irrigate with copious quantity of water for at least 15 minutes. Eyelids to be held open. In all cases of eye contamination it is a sensible precaution to seek medical advice.

If swallowed

Rinse mouth thoroughly with water immediately, repeat until all traces of product have been removed. DO NOT INDUCE VOMITING. Seek medical advice if effects persist.

### Most important symptoms/effects, acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

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

For advice, contact the National Poisons Information Centre (Phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor.

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## SECTION 5: Fire-fighting measures

### Suitable extinguishing media

Small fire: Use dry chemical, CO<sub>2</sub> or water spray.

If safe to do so, move undamaged containers from the fire area.

Large fire: Use water spray, fog or foam - Do NOT use water jets. Cool containers with flooding quantities of water until well after the fire is out. Avoid getting water inside the containers.

### Specific hazards arising from the chemical

Hazards from Combustion Products: May liberate toxic fumes in fire (nitrogen and sulfur oxides).

Material does not burn. Fire or heat will produce irritating, poisonous and/or corrosive gases.

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Sulfamic acid: Nitrogen oxides (NO<sub>x</sub>), Sulphur oxides

### Special protective actions for fire-fighters

Wear SCBA and chemical splash suit. Fully encapsulating, gas-tight suits should be worn for maximum protection.

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## SECTION 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Evacuate the area of all non-essential personnel. Avoid inhalation, contact with skin, eyes and clothing. Avoid substance contact. Avoid generation of dusts: do not inhale dusts. Ensure supply of fresh air in enclosed rooms.

Wear protective clothing specified for normal operations (see Section 8)

### Methods and materials for containment and cleaning up

Sweep up (avoid generating dust) and remove to a suitable, clearly labelled container for disposal in accordance with local regulations.

Prevent contamination of soil and water.

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## SECTION 7: Handling and storage

### Precautions for safe handling

Avoid generation or accumulation of dusts. Avoid prolonged or repeated contact with skin, eyes and clothing. Use in well ventilated areas away from all ignition sources. In case of insufficient ventilation, wear suitable respiratory equipment.

### Conditions for safe storage, including any incompatibilities

Corrosiveness: In the presence of water, corrosive to most metals.

Store away from oxidizing agents. Store away from acids. Keep containers closed at all times. Store in well ventilated area. Store in a cool, dry place. Store away from sources of heat or ignition.

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## **SECTION 8: Exposure controls/personal protection**

### **Control parameters**

#### **CAS: 5329-14-6 (EC: 226-218-8)**

Sulfamic Acid

ACGIH: 10 mg/m<sup>3</sup> (inhalable), 3 mg/m<sup>3</sup> (respirable) TLV® inhalation; OSHA: 15 mg/m<sup>3</sup> (total dust), 5 mg/m<sup>3</sup> (respirable) PEL-TWA inhalation

### **Appropriate engineering controls**

Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, gas, etc.) below recommended exposure limits.

### **Individual protection measures, such as personal protective equipment (PPE)**

#### **Eye/face protection**

The use of a face shield, chemical goggles or safety glasses with side shield protection as appropriate. Must comply with Australian Standards AS 1337 and be selected and used in accordance with AS 1336.

#### **Skin protection**

Clean impervious clothing should be worn. Clothing for protection against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.

Hand Protection: Ensure hand protection complies with AS 2161, Occupational protective gloves - Selection, use and maintenance.

#### **Body protection**

Clean clothing or protective clothing should be worn, preferably with an apron. Clothing for protection against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.

#### **Respiratory protection**

Where ventilation is not adequate, respiratory protection may be required. Avoid breathing dust, vapours or mists. Respiratory protection should comply with AS 1716 - Respiratory Protective Devices and be selected in accordance with AS 1715 - Selection, Use and Maintenance of Respiratory Protective Devices. Filter capacity and respirator type depends on exposure levels. In event of emergency or planned entry into unknown concentrations a positive pressure, full-facepiece SCBA should be used. If respiratory protection is required, institute a complete respiratory protection program including selection, fit testing, training, maintenance and inspection.

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## **SECTION 9: Physical and chemical properties**

### **Basic physical and chemical properties**

Physical state	Solid
Appearance	White, crystalline powder.
Color	No data available.
Odor	Odourless.
Odor threshold	No data available.
Melting point/freezing point	205 °C (decomposes)
Boiling point or initial boiling point and boiling range	No data available.
Flammability	No data available.
Lower and upper explosion limit/flammability limit	No data available.
Flash point	No data available.
Explosive properties	No data available.
Auto-ignition temperature	No data available.
Decomposition temperature	No data available.

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Oxidizing properties  
pH

No data available.

1.18 (10 g/l, H<sub>2</sub>O, 25 °C) <br> Aqueous solutions are highly ionized giving pH values lower than solutions of formic, phosphoric, and oxalic acids.

Kinematic viscosity  
Solubility  
Partition coefficient n-octanol/water (log value)  
Vapor pressure  
Evaporation rate  
Density and/or relative density  
Relative vapor density  
Particle characteristics

No data available.

Solubility in Water: Soluble

log P (o/w): 0.1

0.0078 hPa

No data available.

Specific Gravity: 2.15

No data available.

No data available.

### Supplemental information regarding physical hazard classes

No data available.

### Further safety characteristics (supplemental)

Other Information: All the common salts (including calcium, barium and lead) are extremely soluble in water.

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## SECTION 10: Stability and reactivity

### Reactivity

Stable under normal conditions of storage and handling.

### Chemical stability

Stable under recommended storage conditions.

### Possibility of hazardous reactions

In water solutions, the acid material slowly hydrolyzes to form ammonium sulfate and bisulfate.

### Conditions to avoid

Exposure to moisture.

Avoid storing in direct sunlight and avoid extremes of temperature.

### Incompatible materials

Strong oxidisers (ie. nitrates, nitrites, nitric acid), halogens, strong bases, metals with water.

Sulfamic acid: Reactives violently with strong alkaline substances. May be corrosive to metals.

### Hazardous decomposition products

Ammonia, oxides of sulfur, carbon and nitrogens.

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## SECTION 11: Toxicological information

### Information on toxicological effects

#### Acute toxicity

Acute Toxicity - Oral: LD50 (rat): 3160 mg/kg

Ingestion: Swallowing causes irritation and may cause severe burns of the mouth, throat, oesophagus and stomach, lead to death. Can cause sore throat, vomiting and diarrhea.

Inhalation: Inhalation of dust produces extremely destructive irritation to tissues of the mucous membranes and upper respiratory tract. Symptoms may include burning sensation and irritation symptoms in the respiratory tract, coughing, shortness of breath, wheezing,

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sneezing, laryngitis, dyspnoea, headache, nausea and vomiting. Inhalation may result in spasm, inflammation and edema of the larynx and bronchi, chemical pneumonitis, and pulmonary edema.

// ----- From the Suggestion report (26/08/2024, 10:05 AM) ----- //

The ATE (oral) of the mixture is: 500 mg/kg bw

#### Skin corrosion/irritation

Causes skin irritation, redness, pain, inflammation and blistering. Severe burns may occur.

#### Serious eye damage/irritation

Causes eye irritation, blurred vision, redness, watering, itching, pain and severe tissue burns and eye damage.

#### Respiratory or skin sensitization

No data available

#### Germ cell mutagenicity

No data available.

#### Carcinogenicity

No data available.

#### Reproductive toxicity

No data available.

#### Summary of evaluation of the CMR properties

No data available.

#### Specific target organ toxicity (STOT) - single exposure

No data available.

#### Specific target organ toxicity (STOT) - repeated exposure

No data available.

#### Aspiration hazard

No data available.

#### Additional information

Chronic Effects: Severe or over exposure can produce lung damage, choking, unconsciousness or death.

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## SECTION 12: Ecological information

#### Toxicity

Environmental Protection: Harmful effect on aquatic organisms. May cause long-term adverse effects in the aquatic environment.

Acute Toxicity - Fish: LC50 (P. promelas): 70.3 mg/l/96 h.

Acute Toxicity - Bacteria: EC10 (Ps. putida): > 1000 mg/l/16 h.

#### Bioaccumulative potential

No bioaccumulation is to be expected (log P(o/w) < 1)

#### Mobility in soil

Product is water soluble therefore likely to be highly mobile in environment and soils.

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## SECTION 13: Disposal considerations

**Disposal methods**

**Product disposal**

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers.

**Sewage disposal**

No bioaccumulation is to be expected (log P(o/w) < 1)

**Other disposal recommendations**

Do not discharge this material into waterways, drains and sewers.

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**SECTION 14: Transport information**

**ADG (Road and Rail)**

UN Number: 2967

Class: 8

Packing Group: III

Proper Shipping Name: SULFAMIC ACID

**Hazchem emergency action code (EAC)**

2Z

**IMDG**

UN Number: 2967

Class: 8

Packing Group: III

EMS Number:

Proper Shipping Name: SULFAMIC ACID

**IATA**

UN Number: 2967

Class: 8

Packing Group: III

Proper Shipping Name: SULFAMIC ACID

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**SECTION 15: Regulatory information**

**Safety, health and environmental regulations specific for the product in question**

**Australia SUSMP**

Poison Schedule: S6

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**SECTION 16: Other information**

**Further information/disclaimer**

ChemSupply Australia Pty Ltd does not warrant that this product is suitable for any use or purpose. The user must ascertain the suitability of the product before use or application intended purpose. Preliminary testing of the product before use or application is recommended. Any reliance or purported reliance upon ChemSupply Australia Pty Ltd with respect to any skill or judgement or advice in relation to the suitability of this product of any purpose is disclaimed. Except to the extent prohibited at law, any condition implied by any statute as to the merchantable quality of this product or fitness for any purpose is hereby excluded. This product is not sold by description. Where the provisions of Part V, Division 2 of the Trade Practices Act apply, the liability of ChemSupply Australia Pty Ltd is limited to the replacement of supply of equivalent goods or payment of the cost of replacing the goods or acquiring equivalent goods.

**Preparation information**

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Standard for the Uniform Scheduling of Medicines and Poisons, Commonwealth of Australia

National Road Transport Commission, 'Australian Code for the Transport of Dangerous Goods by Road and Rail 7th. Ed.'

Safe Work Australia, 'National Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals', July 2020.

Safe Work Australia, 'National Guide for Classifying Hazardous Chemicals', July 2020.

Safe Work Australia, Workplace Exposure Standards for Airborne Contaminants, December 2019

Safe Work Australia, Hazardous Chemical Information System (HCIS), [hcis.safeworkaustralia.gov.au](http://hcis.safeworkaustralia.gov.au)

IATA, Dangerous Goods Regulations (DGR)

IMO, International Maritime Dangerous Goods Code (IMDG)