

## Safety Data Sheet

### 1. IDENTIFICATION OF THE PRODUCT AND THE SUPPLIER

#### 1.1 Product identifiers

Product name : SULPHAMIC ACID

#### 1.2 Other means of identification

Aminosulphonic acid, sulphamic acid, sulphamidic acid, H<sub>3</sub>NO<sub>3</sub>S.

#### 1.3 Recommended use of the product and restrictions on use

Manufacture of sodium cyclamate, flame retardents, descaling, acid cleaning, nitrite removal, anodising metals and electroplating.

#### 1.4 Details of supplier of the safety data sheet

Company : AGent Sales & Services Pty Ltd

Street address : 38 May Holman Drive, Bassendean, Western Australia 6054

Telephone : (+61 8) 6270 4500 / 1300 833 844

Fax : (+61 8) 6270 4544

#### 1.5 Emergency telephone number

Telephone : 1800 995 539

### 2. HAZARDS IDENTIFICATION

Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; DANGEROUS GOODS.

#### 2.1 GHS Classification

Serious eye irritation (Category 2A)

Skin corrosion (Category 2)

Long-term hazard to the aquatic environment (Category 3)

#### 2.2 GHS Label elements, including precautionary statements

##### Pictogram



##### Signal word

: WARNING

##### Hazard statement(s)

H319 Causes serious eye irritation.

H315 Causes skin irritation.

H412 Harmful to aquatic life with long lasting effects.

##### Precautionary statement(s)

##### Prevention

P264 Wash exposed skin thoroughly after handling.

P273 Avoid release to the environment.

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

**Response**

P302 + P352 IF ON SKIN (or hair): Wash with plenty of soap and water.  
 P332 + P313 If skin irritation occurs: Get medical advice/attention.  
 P362 Take of contaminated clothing and wash before re-use.  
 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.  
 P312 Call a POISON CENTRE or doctor/physician if you feel unwell.

**Storage**

P403 + P233 Store in a well ventilated place. Keep container tightly closed.  
 P405 Store locked up.

**Disposal**

P501 Dispose of contents/container in accordance with local/regional/national regulations.

**Other hazards**

None.

**3. COMPOSITION / INFORMATION ON INGREDIENTS**

Component	CAS Number	Classification	Concentration (%)
Sulphamic Acid	5329-14-6	Eye Irrit. 2A; Skin Corr. 2; Long-term Aquat Haz. 3	100

For the full text of the H-Statements mentioned in this section, see Section 16

**4. FIRST AID MEASURES****4.1 Description of First Aid measures****General advice**

Symptoms of poisoning may develop several hours following exposure; medical observation therefore necessary for at least 48 hours. Indication of any immediate medical attention and special treatment needed Symptoms of irritation to skin, eyes or lungs. Symptoms of exposure may include abdominal pain, vomiting, diarrhea, drop in blood pressure, burning sensation, shock.

**If inhaled**

Remove victim from exposure to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Do NOT use mouth to mouth method. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Seek medical attention.

**In case of skin contact**

Get medical advice/attention. If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Continue flushing with water until advised to stop by a Poisons Information Centre (e.g. phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor/physician. If skin irritation occurs, get medical advice/attention. Wash contaminated clothing before reuse.

**In case of eye contact**

Get medical advice/attention. If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing for at least 15 minutes, or until advised to stop by a Poisons Information Centre or a doctor/physician. Remove contact lenses, if present and easy to do. Continue rinsing. Take care not to rinse contaminated water into the non-affected eye. If eye irritation persists, get medical advice/attention.

**If swallowed**

If swallowed, do NOT induce vomiting. Rinse mouth with water. Give water to drink provided victim is conscious. If vomiting occurs, lean patient forward or place on left side (head-down position if possible) to maintain open airway and prevent aspiration. Seek immediate medical attention.

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

The most important known symptoms and effects are described in Section 2.2 and/or Section 11.

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

Treat symptomatically.

**4.4 First Aid facilities**

Eye wash facilities and safety shower should be available.

## 5. FIRE FIGHTING MEASURES

### 5.1 Suitable extinguishing media

Water fog (or if unavailable, fine water spray), foam, dry chemical powder, carbon dioxide

### 5.2 Special hazards arising from the chemical

Non-combustible solid. Material does not burn nor will it support combustion. Hazardous decomposition products may include noxious and toxic oxides of carbon fumes.

### 5.3 Special protective equipment and precautions for fire fighters

Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to products of decomposition. Do not allow fire-fighting water to reach waterways, drains or sewers. Store fire-fighting water for treatment.

### 5.4 Hazchem code

2X

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Avoid breathing vapours, mist or gas. May be slippery when spilt. Eliminate all sources of ignition. Increase ventilation. Stop leak if safe to do so and isolate danger area. For personal protection see section 8.

### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. If contamination of sewers or waterways has occurred, advise local emergency services. Observe all local and national regulations.

### 6.3 Methods and materials for containment and cleaning up

Slippery when spilt. Avoid accidents, clean up immediately. Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Collect and seal in properly labelled containers or drums for disposal. Wash area down with excess water.

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Ensure an eye bath and safety shower are available and ready for use. Observe good personal hygiene practices and recommended procedures. Wash thoroughly after handling. Take precautionary measures against static discharges by bonding and grounding equipment. Avoid contact with eyes, skin and clothing. Do not inhale product dust/fumes

### 7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well-ventilated area. Keep containers tightly closed when not in use. Inspect regularly for deficiencies such as damage or leaks. Protect against physical damage. Store away from incompatible materials as listed in section 10. This product is not classified dangerous for transport according to The Australian Code for the Transport of Dangerous Goods By Road and Rail.

## 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

### 8.1 Control parameters

The following exposure standard has been established by The Australian Safety and Compensation Council (ASCC);

DNELs (workplace):

DNEL inhalation (8 h): 7.5 mg/m<sup>3</sup>

DNELs (consumer):

DNEL oral: 1.06 mg/kg bw/day

DNEL inhalation: 1.85 mg/m<sup>3</sup>

These exposure standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

### Biological Limits

PNEC aqua (freshwater): 0.3 mg/L

PNEC sediment (freshwater): 0.3 mg/kg sediment dw

PNEC aqua (marine water): 0.03 mg/L

PNEC sediment (marine water): 0.03 mg/kg sediment dw

## 8.2 Exposure controls

### Appropriate engineering controls

General industrial hygiene practice.

### Personal protective equipment (PPE)

The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods and environmental factors.

### Eye/face protection

Safety glasses or goggles. See Australian Standards (AS/NZS 1336 & 1337).

### Skin protection

Wear impervious gloves and protective clothing (splash apron or equivalent chemical impervious outer garment and rubber boots) appropriate for the risk of exposure. See Australian Standards (AS 2161 & 2919 and AS/NZS 2210).

Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use. Wash and dry hands.

### Respiratory protection

Where risk assessment shows inhalation risk exists, wear an approved P1 or P2 particulate filter respirator. See Australian Standards (AS/NZS 1715 & 1716). Use dust mask as a minimum.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Form : Solid, crystalline Colour : White
<b>Odour:</b>	Odourless
<b>Odour Threshold:</b>	No data available
<b>pH:</b>	1.18 (1% solution)
<b>Melting Point (°C):</b>	205
<b>Boiling Point/Range (°C):</b>	Decomposes
<b>Decomposition Temperature:</b>	> 209°C
<b>Evaporation Rate:</b>	No data available
<b>Flash Point:</b>	Not applicable
<b>Flammability Limits:</b>	Not applicable
<b>Specific Gravity:</b>	2.13 g/cm <sup>3</sup>
<b>Vapour Density (air=1):</b>	3.35
<b>Vapour Pressure:</b>	0.0078 hPa
<b>% Volatiles:</b>	No data available
<b>Solubility in water:</b>	213 g/L

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

No data available.

### 10.2 Chemical stability

Product is stable under normal conditions of use, storage and temperature

### 10.3 Possibility of hazardous reactions

Polymerisation is not expected to occur.

#### 10.4 Conditions to avoid

Sources of ignition. Direct sunlight. Extremely high temperatures

#### 10.5 Incompatible materials

Avoid strong oxidisers, Nitric acid, Chlorine. Solutions are strong acids and react violently with bases.

#### 10.6 Hazardous decomposition products

Generates dangerous gases or fumes in contact with: halogens, alkalis, oxidising agents, nitrates, nitrites, nitric acid, metal and water. Ambient fire may liberate hazardous vapours. Fire may cause evolution of: sulphur dioxides, nitrogen oxides.

### 11. TOXICOLOGICAL INFORMATION

#### 11.1 Information on toxicological effects

##### Acute toxicity

No data available

Ingestion	ACUTE TOXICITY: ORAL Rat LD50 >2,000 mg/kg (OECD 401) SYMPTOMS: irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract.
Inhalation	ACUTE TOXICITY: INHALATION SYMPTOMS: cough, shortness of breath, irritation symptoms in the respiratory tract.
Skin/Irritant	SKIN CORROSION/IRRITATION: SPECIES: Rabbit RESULT: Irritant METHOD: OECD test guideline 404
Eye/Irritant	EYE DAMAGE/IRRITATION: SPECIES: Rabbit RESULT: Severe irritation METHOD: OECD test guideline 405
Mutagenicity	Mutagenicity (mammal cell test): micronucleus Result: negative Method: OECD test guideline 474 Ames test: Salmonella typhimurium Result: negative Method: OECD test guideline 471

##### Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

##### Health Effects

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

**Eye contact:** A serious eye irritant. May cause tearing, stinging, blurred vision and redness.

**Skin contact:** Causes irritation to skin, including redness, itching and pain.

**Ingestion:** Swallowing may irritate the gastrointestinal tract causing nausea, vomiting and diarrhoea.

**Inhalation:** Breathing in mists or aerosols may produce respiratory irritation.

#### 11.2 Information on possible routes of exposure

The substance can be absorbed into the body by ingestion, inhalation of its vapour, mist or aerosol, eye contact and skin contact.

#### 11.3 Additional Information

RTECS: Not available

## 12. ECOLOGICAL INFORMATION

### 12.1 Ecotoxicity

Avoid contaminating waterways.

Toxicity to fish:

Species: pimephales promelas (fathead minnow)

LC50: 70.3 mg/l

Exposure time: 96 h

Method: OECD test guideline 203

Toxicity to bacteria:

Species: Pseudomonas putida

EC10  $\geq$  1.000 mg/l

Exposure time: 16 h

Method: IUCLID

#### Toxicity to fish:

Highly toxic to fish. Not considered to be toxic to bacteria.

### 12.2 Persistence and degradability

Easily biodegradable.

### 12.3 Bioaccumulative potential

No data available.

### 12.4 Mobility in soil

No data available.

### 12.5 Other adverse effects

No data available.

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Disposal methods and containers

Ensure waste disposal conforms to relevant local, state and federal authority waste disposal regulations

## 14. TRANSPORT INFORMATION

Classified as **DANGEROUS GOODS** by the criteria of the ADG Code for transport by road or rail.

Classified as **DANGEROUS GOODS** by the criteria of the IMDG Code for transport by sea.

Classified as **DANGEROUS GOODS** by the criteria of the IATA Code for transport by air.

14.1 UN number	2967
14.2 Proper shipping name	SULPHAMIC ACID
14.3 Transport hazard class	8 Corrosive Substances
14.4 Packing group	III
14.5 Environmental hazards	None allocated
14.6 Special precautions for users	None allocated
14.7 Hazchem code	2X
14.8 Dangerous goods initial emergency response guide (SAA/SNZ HB76:2010)	37

## 15. REGULATORY INFORMATION

### 15.1 Safety, health and environmental regulations

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

None allocated

**Carcinogen classification under WHS Regulations 2011, Schedule 10**

Not listed

**Notification status**

**SECTION 16 OTHER INFORMATION****Key / legend to abbreviations and acronyms used in the MSDS**

ADG	Australian Dangerous Goods
ASCC	Australian Safety and Compensation Council
DEC	Department of Environment and Conservation
GHS	Globally Harmonised System of Classification & Labelling of Chemicals
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
NOHSC	National Occupational Health and Safety Commission
SUSDP	Standard for the Uniform Scheduling of Drugs and Poisons
RTECS	Registry of Toxic Effects of Chemical Substances.
SWA	Safe Work Australia
Eye Irrit	Eye Irritation
pH	Relates to hydrogen ion concentration - this value will relate to a scale of 0 - 14, where 0 is highly acidic and 14 is highly alkaline

**Full text of H-Statements referred to under sections 2 and 3.**

H319 Causes serious eye irritation.

**Literature references**

"Workplace Exposure Standards for Airborne Contaminants, December 2011" by SWA Work Health and Safety Regulations 2011

"Registry of Toxic Effects of Chemical Substances". Ed. D. Sweet, US Dept. of Health & Human Services: Cincinatti, 2012.

**Reason(s) for Issue:**

Update Contact Details

**Disclaimer**

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