

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Identifier:

Product Name: GASSER 1

Other Means of Identification:

Synonyms: Acetic Acid Solution

Proper Shipping Name: ACETIC ACID SOLUTION, more than 10% and less than 50%, by mass

Recommended Use of the Chemical and Restrictions on Use:

Recommended Use: Sensitising agent for POLAR SX and POLAR UX Bulk Emulsions

Restrictions on Use: For use only by suitably qualified persons

Supplier's Details:

Supplier's Name: Nitro Sibir Australia

Address: Suite 3, Level 1, 1 Puccini Court
Stirling WA 6021

Telephone: +61 8 9022 3821

Emergency Telephone Number:

Emergency Number: 1800 884 289 (all hours)

SDS Date: July 2023

2. HAZARDS IDENTIFICATION

Classification of the Substance or Mixture:

Classified as hazardous according to the criteria of Safe Work Australia: HAZARDOUS CHEMICAL

Classified as Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code): DANGEROUS GOODS.

GHS Label Elements, Including Precautionary Statements:

Corrosive to Metals – Category 1

Skin Corrosion / Irritation – Category 1C

Eye Damage/Irritation – Category 1

Signal Word: Danger



Corrosive

Hazard Statement(s):

H290: May be corrosive to metals

H314: Causes severe skin burns and eye damage

H318: Causes serious eye damage

Precautionary Statement(s):

Prevention:

P234: Keep only in original packaging.

P260: Do not breathe dusts or mists.

P264: Wash hands, face and all exposed skin thoroughly after handling.

P280: Wear protective gloves, protective clothing and eye protection.

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Response:

P390: Absorb spillage to prevent material damage.

P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

P363: Wash contaminated clothing before reuse.

P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P310: Immediately call a POISON CENTRE or doctor.

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

Storage:

P406: Store in corrosive resistant container with a resistant inner liner.

P405: Store locked up.

Disposal:

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

POISONS SCHEDULE (SUSMP): Schedule 5 Poison.

Other Hazards Which Do Not Result in Classification:

No information available.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient	CAS No	Proportion
Acetic Acid (C ₂ H ₄ O ₂)	64-19-7	30-50%
Water	7732-18-5	to 100%

4. FIRST AID MEASURES

Description of Necessary First Aid Measures:**General Advice:**

For advice, contact a doctor or Poisons Information Centre (131 126).

Inhalation:

If inhaled, remove from contaminated area and keep at rest in a comfortable position. Apply artificial respiration if not breathing. DO NOT use mouth-to-mouth method. Administer oxygen if breathing is difficult. Seek immediate medical attention.

Eye:

If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre (131 126) or a doctor, or for at least fifteen (15) minutes. In all cases of eye contamination, it is sensible to seek medical advice and/or attention.

Skin:

If contact with skin or hair occurs, immediately remove any contaminated clothing and wash skin and hair thoroughly with running water. If redness, swelling, blistering or irritation occurs, seek medical advice/attention. For skin burns, flood burnt area with plenty of water and cover with a clean, dry dressing. Launder contaminated clothing before reuse.

Ingestion:

Immediately rinse mouth with water. If swallowed DO NOT induce vomiting. Never give anything by mouth to an unconscious or convulsing person. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs. For advice, contact a Poisons Information Centre (131126 Australia wide) or a doctor. Urgent hospital treatment is likely to be needed.

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Most Important Symptoms/Effects, Acute and Delayed:

Symptoms and Effects: Treat symptomatically. Keep victim calm and warm – obtain immediate medical care.

Indication of Immediate Medical Attention and Special Treatment, if Necessary:

Information to Doctor: CORROSIVE POISONING TREATMENT. Immediate treatment preferably in a hospital is necessary. It is important to discover the chemical substance ingested. In treating corrosive poisoning, DO NOT induce vomiting. DO NOT attempt gastric lavage and DO NOT attempt to neutralise the corrosive substance. Vomiting will increase the severity of damage to the oesophagus. Attempting gastric lavage may result in perforating either the oesophagus or the stomach. Immediately dilute the corrosive substance by having the patient drink milk or water. If the trachea has been damaged, tracheostomy may be required. For oesophageal burns, begin broad-spectrum antibiotics and corticosteroid therapy. Intravenous fluids will be required if oesophageal or gastric damage prevents ingestion of liquids. Long-range therapy will be directed towards preventing or treating oesophageal scars and strictures.

5. FIRE FIGHTING MEASURES**Suitable Extinguishing Media:**

Suitable Extinguishing Media: Dry agent: Carbon dioxide (CO₂) or dry chemical powder. Foam. Water spray.

Unsuitable Extinguishing Media: Water jets.

Specific Hazards Arising from the Chemical:

Specific Hazards: May emit toxic gases. Vapour may form explosive mixtures with air.

Hazards from Combustion Products: Toxic gases of hydrocarbons and carbon oxides may be emitted when heated to decomposition.

Special Protective Actions for Fire Fighters:

Precautions and Special Protective Equipment: Containers may explode when heated. Remain upwind and notify those downwind of hazard. Wear full protective equipment including self-contained breathing apparatus (SCBA) and chemical splash suit. Structural firefighter's uniform is NOT effective for this material.

HAZCHEM CODE: 2R

6. ACCIDENTAL RELEASE MEASURES**Personal Precautions, Protective Equipment and Emergency Procedures:**

For Non-Emergency Personnel: Ensure adequate ventilation to dispel residual vapour or fumes – ventilate enclosed spaces before entering. ELIMINATE all sources of ignition. Do not breathe vapour or fumes. Clean up spills immediately. In the case of a transport accident notify the local emergency services and Nitro Sibir Australia.

For Emergency Personnel: Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Prevent runoff into drains and waterways. Absorb spill with earth, sand or other non-combustible material and transfer to a properly labelled, suitable container for disposal. Flush area with water to remove trace residue.

Environmental Precautions:

Environmental Precautions: Small spills and decontamination run-off may be washed to drains with large quantities of water. Care must be exercised to avoid unnecessary contamination of drains and waterways.

Methods and Materials for Containment and Cleaning Up:

Methods for Containment: Prevent run off into drains and waterways using inert material such as soil, sand or vermiculite. Clean up immediately.

Methods for Cleaning Up: Collect in properly labelled suitable containers for disposal.

SAFETY DATA SHEET – CHEMICAL REAGENTS

7. HANDLING AND STORAGE

Precautions for Safe Handling:

Advice for Safe Handling: Ensure eyewash stations and safety showers are proximal to the workstation location. This material is a Scheduled Poison – S5, and must be handled, used and stored in accordance with the relevant regulations.

General Hygiene Advice: Handle in accordance with good industrial hygiene and safety practices. Observe good personal hygiene. Do NOT eat, drink or smoke when using this material. Use in a well-ventilated area. Wash hands before breaks and immediately after handling the product.

Conditions for Safe Storage Including any Incompatibilities:

Conditions for Safe Storage: Store in a cool, dry, well-ventilated place out of direct sunlight.

Keep containers closed when not in use. Keep securely sealed and protected against physical damage. Inspect regularly for spills.

Storage Incompatibilities: Incompatible with alkalis, oxidising agents and chemicals readily decomposed by acids, i.e. cyanides, sulphides, carbonates. Corrosive to metals.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters:

Exposure Limits: The following exposure values have been assigned to this material by Safe Work Australia:

Substance	STEL		TWA		Reference
	ppm	mg/m ³	ppm	mg/m ³	
Acetic Acid (C ₂ H ₄ O ₂)	15	37	10	25	SWA (AUS)

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.

TWA (Time Weighted Average): The average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day working week.

STEL (Short Time Exposure Limit): The average airborne concentration over a 15-minute period which should not be exceeded at any time during a normal eight-hour working day.

Appropriate Engineering Controls:

Engineering Controls: Use in a well-ventilated area. Keep containers closed when not in use. Provide adequate ventilation in warehouse or closed storage areas.

Individual Protection Measures, such as Personal Protective Equipment (PPE):

Individual Protection Measures: A detailed and documented risk assessment must be carried out to determine minimum PPE requirements. Ensure that eyewash stations and safety showers are proximal to the workstation location.

Wear protective clothing (overalls, splash apron), safety glasses, impervious gloves and rubber boots when handling and using this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties and Safety Characteristics:

Physical State: Liquid

Colour: Clear, colourless

Odour: Strong vinegar odour, pungent

Odour Threshold: Not available

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Melting / Freezing Point:	Not available
Initial Boiling Point and Boiling Range:	79-100°C
Flammability:	Not available
Lower / Upper explosion limit / flammability limit	Not available
Flash Point:	Not available
Auto-ignition temperature:	Not available
Decomposition Temperature:	Not available
pH:	<2
Kinematic Viscosity:	Not available
Solubility:	Miscible with water
Partition Coefficient:	Not applicable
Vapour Pressure:	45 torr (@ 25°C)
Relative Density:	Not available
Vapour Density:	Not available
Particle Characteristics:	Not applicable
Explosive Properties:	Not applicable
Further Safety Characteristics:	Contact with metals may evolve flammable hydrogen gas.

10. STABILITY AND REACTIVITY**Reactivity:**

Reacts with strong oxidants, strong bases and strong acids. Attacks some forms of plastic, rubber and coatings.

Chemical Stability:

Stable under recommended conditions of storage. Unstable in the presence of incompatible materials.

Possibility of Hazardous Reactions:

Hazardous polymerisation will not occur.

Conditions to Avoid:

Avoid contact with heat and sources of ignition.

Incompatible Materials:

Incompatible with strong acids, strong bases, strong oxidants and chemicals readily decomposed by acids, i.e. cyanides, sulphides and carbonates. Corrosive to metals.

Hazardous Decomposition Products:

Thermal decomposition may result in the release of corrosive, irritating and/or toxic fumes of carbon.

11. TOXICOLOGICAL INFORMATION**General Advice:**

No adverse health effects are expected if the product is handled in accordance with this Safety Data Sheet and the product label.

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Acute Toxicity:

Severe health effects have been reported following accidental exposure, mainly due to the local corrosive effects of the chemical leading to systemic effects. Ingestion may cause nausea, abdominal pain and vomiting, severe corrosion of the mouth and gastrointestinal tract, perforation of the oesophagus, bloody vomiting, diarrhoea, shock, haemolysis, haemoglobinuria and death.

Information on Likely Routes of Exposure:

Skin corrosion / irritation:	Skin contact may cause severe skin burns, redness and blisters. Ingestion causes digestive tract burns.
Serious eye damage / irritation:	Causes serious eye damage, redness, pain and loss of vision. May cause permanent eye damage.
Respiratory or skin sensitisation:	Breathing in mists may produce respiratory irritation leading to nasal discharge, hoarseness, coughing, chest pain and difficulty breathing. Accumulation of fluid in the lungs may occur.
Germ cell mutagenicity:	This material is not classed as a mutagen.
Carcinogenicity:	This material is not likely to be a carcinogen.
Reproductive toxicity:	This material is not classed as a reproductive toxin.
Specific target organ toxicity (STOT):	Single exposure – Mist/vapours may cause respiratory irritation, sore throat, cough, burning sensation, headache, dizziness, shortness of breath and difficulty breathing.
Specific target organ toxicity (STOT):	Repeated exposure – Effects may include digestive disorders, chronic inflammation of the respiratory tract, pharyngitis, catarrhal bronchitis and skin dermatitis.
Aspiration hazard:	No information available.

Symptoms Related to the Physical, Chemical and Toxicological Characteristics:

Skin Contact:	Causes severe skin burns, pain, redness and blisters.
Inhalation:	May cause irritation to mucous membranes and the respiratory tract.

Delayed and Immediate Effects and Also Chronic Effects from Short and Long Term Exposure:

Skin Contact:	May cause skin irritation in sensitive persons. Repeated or prolonged skin contact may lead to allergic contact dermatitis.
Inhalation:	May produce respiratory irritation leading to nasal discharge, hoarseness, coughing, chest pain and difficulty breathing.

Numerical Measures of Toxicity:

Acute Toxicity: Information available for the product:

Acetic Acid – Oral LD50 (rat): >2000 mg/kg, Dermal LD50 (rabbit): 1060 mg/kg, Inhalation LC50 (rat): 11.4 mg/kg (4hr)

LC50 (Lethal Concentration) – the concentration of a material in air, which causes the death of 50% (one half) of a large number of test animals. The material is inhaled over a set period of time, usually one (1) or four (4) hours.

LD50 (Lethal Dose) – the amount of a material, given all at once under control conditions, which causes the death of 50% (one half) of a large number of test animals.

Interactive Effects:

No information available.

12. ECOLOGICAL INFORMATION

Exotoxicity:

Fish toxicity: *Lepomis macrochirus* LC50: 75 mg/L/96hr

Crustacea toxicity: *Artemia salina* EC50: 32 mg/L/48hr

EC50 (Effective Concentration) – the concentration of a material drug, antibody or toxicant which induces a response halfway between the baseline and maximum after a specified exposure time.

SAFETY DATA SHEET – CHEMICAL REAGENTS

LC50 (Lethal Concentration) – the concentration of a material in air, which causes the death of 50% (one half) of a large number of test animals. The material is inhaled over a set period of time, usually one (1) or four (4) hours.

Persistence and Degradability:

Readily biodegradable. Low persistence in water/soil. Low persistence in air.

Bioaccumulative Potential:

Low bioaccumulative potential.

Mobility in soil:

High mobility in soil.

13. DISPOSAL CONSIDERATIONS

Disposal methods:

Dispose of waste product and packaging in accordance with all local, state and federal regulations. Packaging may be recycled at an approved facility.

14. TRANSPORT CONSIDERATIONS

Road and Rail:

Classified as a Class 8 (Corrosive Substances) Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.



UN Number: UN2790

Proper Shipping Name: ACETIC ACID SOLUTION, more than 10% and less than 50% acid, by mass

Transport Hazard Class: 8

Packing Group: III

Hazchem Code: 2R

Sea Transport:

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for Transport by Sea.



UN Number: UN2790

Proper Shipping Name: ACETIC ACID SOLUTION, more than 10% and less than 50% acid, by mass

Transport Hazard Class: 8

Packing Group: III

IMDG EMS Fire:

F-A

IMDG EMS Spill:

S-B

Air Transport:

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for Transport by Air.



UN Number: UN2790

Proper Shipping Name: ACETIC ACID SOLUTION, more than 10% and less than 50% acid, by mass

Transport Hazard Class: 8

Packing Group: III

Special Precautions for User:

Transport Information: No additional information.

15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations Specific for the Product in Question:

Australia:

Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG code): DANGEROUS GOODS.

Classified as a hazardous chemical according to the criteria of Safe Work Australia: HAZARDOUS CHEMICAL.

Classified as a Scheduled Poison according to the Standard for the Uniform Scheduling of Medicines and Poisons – S5.

All components of this material are listed on the Australian Inventory of Chemical Substances (AICS) or are exempt.

International Agreements:

This product is not subject to the Montreal Protocol on Substances that Deplete the Ozone Layer.

This product is not subject to the Stockholm Convention on Persistent Organic Pollutants.

This product is not subject to the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade.

16. OTHER INFORMATION

Revision Date: JULY 2023

Reason(s) for Issue: Minor changes made to formatting.

Abbreviations used:

CAS No	Chemical Abstract Service number (chemical unique identifier)
EMS	Emergency Schedules (procedures for ships carrying dangerous goods)
g/cm ³	grams per cubic centimetre
GHS	Globally Harmonised System of Classification and Labelling of Chemicals
pH	Scale of acidity from 0 (acidic) to 14 (alkaline), pH 7 is neutral
PPE	Personal Protective Equipment
ppm	Parts per million
mg/m ³	Milligrams per cubic metre
SUSMP	Standard for the Uniform Scheduling of Medicines and Poisons
TWA	Time Weighted Average

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