Safety Data Sheet Acid Decolouriser (Sulphuric acid)

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SECTION 1: Identification

GHS Product identifier

Product name	Acid Decolouriser (Sulphuric acid)

Recommended use of the chemical and restrictions on use

Product type: Blend of ethanol and sulphuric acid.

Microbiological staining preparation.

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

National contact

Name	Australian Biostains Pty Ltd
Address	16 Shipwright Road 5016 Largs North SA Australia

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

- Flammable liquids, Cat. 2

- Corrosive to metals, Cat. 1
- Serious eye damage/eye irritation, Cat. 1
- Skin corrosion/irritation, Cat. 2

GHS label elements, including precautionary statements

Pictograms

Signal word	**Danger**

Hazard statement(s)

H225	Highly flammable liquid and vapor
H290	May be corrosive to metals
H315	Causes skin irritation
H318	Causes serious eye damage

Precautionary statement(s)

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.
P234	Keep only in original packaging.
P240	Ground and bond container and receiving equipment.
P241	Use explosion-proof [electrical/ventilating/lighting/...] equipment.
P242	Use non-sparking tools.
P243	Take action to prevent static discharges.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of water/soap
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor/physcian
P332+P313	If skin irritation occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P370+P378	In case of fire: Use agents recommended in Section 5 of SDS for extinction
P390	Absorb spillage to prevent material-damage.
P403+P235	Store in a well-ventilated place. Keep cool.
P406	Store in a corrosive resistant/… container with a resistant inner liner.
P501	Dispose of contents/container to an approved waste disposal facility

SECTION 3: Composition/information on ingredients

Mixtures

Composition, information on ingredients: This is a commercial product whose exact ratio of components may vary slightly. Minor quantities of other non hazardous ingredients are also possible.

Components

Component	Concentration
Ethanol (CAS no.: 64-17-5; EC no.: 200-578-6; Index no.: 603-002-00-5)	**>= 70 % (weight)**
CLASSIFICATIONS: Flammable liquids, Cat. 2; Serious eye damage/eye irritation, Cat. 2A. HAZARDS: H225 - Highly flammable liquid and vapor; H319 - Causes serious eye irritation.	

Water (CAS no.: 7732-18-5; EC no.: 231-791-2)	**<= 27 % (weight)**
CLASSIFICATIONS: No data available. HAZARDS: No data available.	
Sulfuric acid (CAS no.: 7664-93-9; EC no.: 231-639-5; Index no.: 016-020-00-8)	**<= 3 % (weight)**
CLASSIFICATIONS: Skin corrosion/irritation, Cat. 1A. HAZARDS: H314 - Causes severe skin burns and eye damage. [SCLs/M-factors/ATEs]: Skin Corr. 1A; H314: C ≥ 15 %; Skin Irrit. 2; H315: 5 % ≤ C < 15 %; Eye Irrit. 2; H319: 5 % ≤ C < 15 %	

SECTION 4: First-aid measures

Description of necessary first-aid measures

General advice	For advice, contact a Poisons Information Centre (e.g. phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor (at once).
If inhaled	If inhaled, remove from contaminated area. Apply artificial respiration if not breathing.
In case of skin contact	If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water.
In case of eye contact	If in eyes, hold eyelids apart and flush eye continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre (e.g. phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor, or for at least 15 minutes.
If swallowed	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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 in an emergency, contact a Poisons Information Centre (Phone Australia 131 126) or a doctor at once.

SECTION 5: Fire-fighting measures

Suitable extinguishing media
Caution: Use of water spray when fighting fire may be inefficient.
Small fire: Use foam, dry chemical, CO2 or water spray.
Large fire: Use foam, fog or water spray - Do not use water jets.
If safe to do so, move undamaged containers from fire area. Cool containers with flooding quantities of water until well after fire is out.

Specific hazards arising from the chemical
FLAMMABLE: These products have a low flash point - Will be easily ignited by heat, sparks or flames at ambient temperatures. Vapours will form explosive mixtures with air. Vapours will travel to source of ignition and flash back. Fire may produce irritating, poisonous and/or corrosive gases. Containers may explode when heated. Many liquids are lighter than water. Many vapours are heavier than air and will collect in low or confined areas (drains, basements, tanks). Vapours from run-off may create an explosion hazard.

Ethanol: Carbon oxides

Sulfuric acid: No data available.

Special protective actions for fire-fighters
Fire fighters should wear full protective clothing and self-contained breathing apparatus (SCBA) operated in positive pressure mode. Fight fire from safe location.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures
Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. For personal protection see section 8.

Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods and materials for containment and cleaning up
ELIMINATE all ignition sources (no smoking, flares, sparks or flame) within at least 50m - All equipment used in handling the product must be earthed. Do not touch or walk through spilled material. Stop leak if safe to do so - Prevent entry into waterways, drains or confined areas. Vapour-suppressing foam may be used to control vapours. Absorb spill with earth, sand or other non-combustible material - Use clean, non-sparking tools to collect material and place it in loosely-covered metal or plastic containers for later disposal. Water spray may be used to knock down or divert vapour clouds.
SEEK EXPERT ADVICE ON HANDLING AND DISPOSAL.

SECTION 7: Handling and storage

Precautions for safe handling
Corrosive liquid. Attacks skin and eyes. Causes burns. Avoid breathing in vapours, mist or fumes. Wear suitable protective clothing, gloves and eye/face protection when mixing and using. Use in designated areas with adequate ventilation. Keep containers tightly closed. Ensure a high level of personal hygiene is maintained when using this product, that is, always wash hands after handling, and before eating, drinking, smoking or using the toilet facilities. Avoid exposure. Do not handle until all safety precautions have been read and understood.

Conditions for safe storage, including any incompatibilities
Refer Australian Standard AS 1940 - 1993 'The storage and handling of flammable and combustible liquids'.

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

SECTION 8: Exposure controls/personal protection

Control parameters

CAS: 64-17-5
Ethanol
ACGIH (USA): (ST) 1000 ppm TLV® inhalation; AU/SWA (Australia): 1000 ppm; 1880 mg/m3 TWA inhalation; NIOSH: 1000 ppm REL inhalation;

CAS: 7664-93-9 (EC: 231-639-5)
Sulfuric acid
ACGIH (USA): 0.2 mg/m3, (Thor.) TLV® inhalation; 0.2 mg/m3 TWA inhalation; AU/SWA (Australia): 3 mg/m3 STEL inhalation; 1 mg/m3 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: Normally not required but if in doubt ensure hand protection should complies with AS 2161, Occupational protective gloves - Selection, use and maintenance.

Body protection
Suitable protective workwear, e.g. cotton overalls buttoned at neck and wrist is recommended. Chemical resistant apron is recommended where large quantities are handled.

Respiratory protection
If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable vapor/ mist filter should be used. Refer to relevant regulations for further information concerning respiratory protective requirements. Reference should be made to Australian Standards AS/ NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.

SECTION 9: Physical and chemical properties

Basic physical and chemical properties

Physical state	Liquid
Appearance	Colourless, transparent, volatile liquid.
Color	Colourless
Odor	Characteristic alcohol odour.
Odor threshold	No data available.
Melting point/freezing point	-41°C
Boiling point or initial boiling point and boiling range	82°C
Flammability	No data available.
Lower and upper explosion limit/flammability limit	No data available.
Flash point	16.5°C
Explosive properties	No data available.
Auto-ignition temperature	No data available.
Decomposition temperature	No data available.
Oxidizing properties	No data available.
pH	No data available.
Kinematic viscosity	No data available.
Solubility	Solubility in Water: Miscible.
Partition coefficient n-octanol/water (log value)	No data available.
Vapor pressure	No data available.
Evaporation rate	No data available.
Density and/or relative density	Specific Gravity: Approx. 0.86
Relative vapor density	No data available.

Particle characteristics
No data available.

Supplemental information regarding physical hazard classes
No data available.

Further safety characteristics (supplemental)
No data available.

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
Avoid contact with formalin (Formaldehyde gas) fumes, as the formation of Bis-Chloro-Methyl-Ether (BCME) is a serious risk.

Conditions to avoid
Heat, sparks, flame and build-up of static electricity.

Incompatible materials
Oxidising agents, peroxides, acids, acid chlorides, acid anhydrides, alkali metals and ammonia.

Ethanol: Alkali metals, Oxidizing agents, Peroxides

Sulfuric acid: Bases, Halides, Organic materials, Carbides, fulminates, Nitrates, picrates, Cyanides, Chlorates, alkali halides, Zinc salts, permanganates, e.g. potassium permanganate, Hydrogen peroxide, Azides, Perchlorates., Nitromethane, phosphorous, Reacts violently with:, cyclopentadiene, cyclopentanone oxime, nitroaryl amines, hexalithium disilicide, phosphorous(III) oxide, Powdered metals

Hazardous decomposition products
May liberate toxic fumes in fire producing carbon monoxide and or carbon dioxide.

Sulfuric acid: Hazardous decomposition products formed under fire conditions. - Sulphur oxides
Other decomposition products - No data available
In the event of fire: see section 5

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity
Ingestion: May cause nausea, vomiting, headache, dizziness, gastric irritation and CNS depression.

Inhalation: Irritating to the mucous membranes and respiratory tract. Risk of absorption. May cause headaches, dizziness, nausea and possible CNS effects.

Skin corrosion/irritation
May cause irritation. Will have a degreasing action on the skin.

Serious eye damage/irritation
May cause irritation and watering. High concentrations of vapours may cause irritation.

Respiratory or skin sensitization
No data available

Germ cell mutagenicity
No data available

Carcinogenicity
Ethanol [61-17-5] in alcoholic beverages are evaluated in the IARC Monographs (Vol. 96) as Group 1: Carcinogenic to humans, (based on effects of drinking alcoholic beverages).
Safe Work Australia does not classify ethanol as a carcinogen.

Reproductive toxicity
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
Not expected to be an aspiration hazard.

Additional information
The long term health effects of alcohol are well known. As this product is a laboratory reagent sold in small packages, it is unlikely that it will be ingested in quantities sufficient to cause long term problems, although it may contribute to alcohol abuse if ingested frequently. Though ethanaol is rapidly oxidized in the body and is therefore non-cumulative, ingestion of even moderate amounts causes lowering of inhibitions, often succeeded by dizziness, headache, or nausea. Larger intake causes loss of motor nerve control, shallow respiration, and in extreme cases unconsciousness and even death. Degree of intoxication is determined by concentration of alcohol in the brain. Of primary importance is the fact that intake of moderate amounts together with barbiturates or similar drugs is extremely dangerous and may even be fatal.

Chronic Effects: Repeated or prolonged skin contact may cause chronic dermatitis. May cause liver and kidney disorders.

Ethanol: Stomach - Irregularities - Based on Human Evidence

Sulfuric acid: Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin.,spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea, Vomiting, Pulmonary edema. Effects may be delayed., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
Stomach - Irregularities - Based on Human Evidence

SECTION 12: Ecological information

Toxicity
No ecological problems are to be expected when the product is handled and used with due care and attention.

Persistence and degradability
No data available.

Bioaccumulative potential
Low probability of bioaccumulation (log P(o/w) <1).

Mobility in soil
No data available.

Results of PBT and vPvB assessment
No data available.

Endocrine disrupting properties
No data available.

Other adverse effects
No data available.

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
Low probability of bioaccumulation (log P(o/w) <1).

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

SECTION 14: Transport information

ADG (Road and Rail)
UN Number: 2924
Class: 3, 8
Packing Group: II
Proper Shipping Name: FLAMMABLE LIQUID, CORROSIVE N.O.S. (CONTAINS ETHANOL AND SULFURIC ACID)

Hazchem emergency action code (EAC)
•3WE

IMDG
UN Number: 2924
Class: 3, 8
Packing Group: II
EMS Number: Proper Shipping Name: FLAMMABLE LIQUID, CORROSIVE N.O.S. (CONTAINS ETHANOL AND SULFURIC ACID)

IATA
UN Number: 2924
Class: 3, 8
Packing Group: II
Proper Shipping Name: FLAMMABLE LIQUID, CORROSIVE N.O.S. (CONTAINS ETHANOL AND SULFURIC ACID)

SECTION 15: Regulatory information

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

Australia SUSMP
Poison Schedule: NS

HSNO Approval Number:
HSR002596 Laboratory Chemical and Reagent Kits

Massachusetts Right To Know Components
Sulfuric acid
CAS number: 7664-93-9

New Jersey Right To Know Components
Sulfuric acid
CAS number: 7664-93-9

Pennsylvania Right To Know Components
Sulfuric acid
CAS number: 7664-93-9

SARA 302 Components
The following components are subject to reporting levels established by SARA Title III, Section 302:
Sulfuric acid
CAS number: 7664-93-9

SARA 313 Components
The following components are subject to reporting levels established by SARA Title III, Section 313:
Sulfuric acid
CAS number: 7664-93-9

SARA 311/312 Hazards
Acute Health Hazard, Chronic Health Hazard

California Prop. 65 Components
WARNING! This product contains a chemical known to the State of California to cause cancer.
Sulfuric acid
CAS number: 7664-93-9

Canadian Domestic Substances List (DSL)
Chemical name: Sulfuric acid
CAS: 7664-93-9

SECTION 16: Other information

1.0 - Created
1.1 - Increased sulphuric concentration to 3%, and removed concentration from title

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 fot 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 Airbourne Contaminants, December 2019
Safe Work Australia, Hazardous Chemical Information System (HCIS), hcis.safeworkaustralia.gov.au
IATA, Dangerous Goods Regulations (DGR)
IMO, International Maritime Dangerous Goods Code (IMDG)