Section 1. PRODUCT IDENTIFICATION

Product Name	Battery Fluid, Acid
Other Names	Battery Fluid, Sulphuric Acid 1260, Electrolyte, Battery Acid,
Use	Electrolyte for lead-acid batteries
Supplier Name and Address	Century Yuasa Batteries 37-65 Cobalt St Carole Park QLD 4300
Telephone	(07) 3361 6161
Emergency (24 Hours)	(07) 3361 6707
Relevant identified uses	Electrolyte for lead-acid batteries

Section 2. HAZARD(S) IDENTIFICATION

HAZARDOUS CHEMICAL DANGEROUS GOODS. According to the Model WHS Regulations and the ADG Code.

Poisons Schedule **S6** *Classified as S6:- Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)*

Signal Word **DANGER**

GHS Classification Metal Corrosion Category 1, Acute Toxicity (Inhalation) Category 2, Skin Corrosion/Irritation Category 1A, Serious Eye Damage Category 1

GHS Label Elements

Corrosive

Acute toxicity

IN THE EVENT OF EXPOSURE TO BATTERY FLUID, ACID

Hazard Statements

H290	May be corrosive to metals	**H330**	Fatal if inhaled
H302	Harmful if swallowed		
H314	Causes severe skin burns and eye damage		

IN THE EVENT OF EXPOSURE TO INTERNAL COMPONENTS

Precautionary Statements

Prevention

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children
P103	Read label before use.
P234	Keep only in original container.
P260	Do not breathe dust / fume / gas / mist / vapours / spray.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves / protective clothing / eye protection / face protection

Response

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/ 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.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P390	Absorb spillage to prevent material damage.

Storage

P406	Store in a corrosion resistant container with resistant inner Liner
P403+P233	Store in a well-ventilated place. Keep container tightly closed.

Disposal

P501	Dispose of contents, container to authorised chemical landfill or if organic, to high temperature incineration

Recycle

Refer to section 13

Section 3. COMPOSITION, INFORMATION ON INGREDIENTS

Ingredient	Identification	Content % weight
Sulphuric Acid <51% (H_2SO_4)	CAS 7664-93-9	33-36%
Water	-	64-67%

Section 4. FIRST AID MEASURES

DESCRIPTION OF FIRST AID MEASURES

Eye contact

- If, Sulphuric acid comes in contact with the eyes:
- Immediately hold eyelids apart and flush the eye continuously with running water.
- Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.
- Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.
- Transport to hospital or doctor without delay.
- Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
-

Skin contact

If, Sulphuric acid comes in contact with skin or hair:

- Immediately flush body and clothes with large amounts of water, using safety shower if available.
- Quickly remove all contaminated clothing, including footwear.
- Wash skin and hair with running water. Continue flushing with water until advised to stop by the Poisons Information Centre.
- Transport to hospital, or doctor.

Inhalation

If fumes or combustion products are inhaled remove from contaminated area.

- Lay patient down. Keep warm and rested.
- Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.
- Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.
- Transport to hospital, or doctor, without delay.
- Inhalation of vapours or aerosols (mists, fumes) may cause lung oedema.
- Corrosive substances may cause lung damage (e.g. lung oedema, fluid in the lungs).
- As this reaction may be delayed up to 24 hours after exposure, affected individuals need complete rest (preferably in semi-recumbent posture) and must be kept under medical observation even if no symptoms are (yet) manifested.
- Before any such manifestation, the administration of a spray containing a dexamethasone derivative or beclomethasone derivative may be considered.
- This must definitely be left to a doctor or person authorised by him/her.

Ingestion

For advice, contact a Poisons Information Centre or a doctor at once.

- Urgent hospital treatment is likely to be needed.
- If swallowed do NOT induce vomiting.
- If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.
- Observe the patient carefully.
- Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.
- Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.
- Transport to hospital or doctor without delay.

MEDICAL ATTENTION AND SPECIAL TREATMENT. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

- For acute or short term repeated exposures to strong acids:
- Airway problems may arise from laryngeal edema and inhalation exposure. Treat with 100% oxygen initially.
- Respiratory distress may require cricothyroidotomy if endotracheal intubation is contraindicated by excessive swelling
- Intravenous lines should be established immediately in all cases where there is evidence of circulatory compromise.
- Strong acids produce a coagulation necrosis characterised by formation of a coagulum (eschar) as a result of the desiccating action of the acid on proteins in specific tissues.

Ingestion:

- Immediate dilution (milk or water) within 30 minutes post ingestion is recommended.
- DO NOT attempt to neutralise the acid since exothermic reaction may extend the corrosive injury.
- Be careful to avoid further vomit since re-exposure of the mucosa to the acid is harmful.
- Limit fluids to one or two glasses in an adult.
- Charcoal has no place in acid management.
- Some authors suggest the use of lavage within 1 hour of ingestion.

Skin:

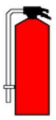
- Skin lesions require copious saline irrigation.
- Treat chemical burns as thermal burns with non-adherent gauze and wrapping.
- Deep second-degree burns may benefit from topical silver sulphadiazine.

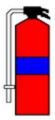
Eye:

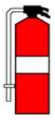
- Eye injuries require retraction of the eyelids to ensure thorough irrigation of the conjuctival cul-de-sacs. Irrigation should last at least 20-30 minutes. DO NOT use neutralising agents or any other additives. Several litres of saline are required.
- Cyclopaedic drops, (1% cyclopentolate for short-term use or 5% homatropine for longer term use) antibiotic drops, vasoconstrictive agents or artificial tears may be indicated dependent on the severity of the injury.
- Steroid eye drops should only be administered with the approval of a consulting ophthalmologist).

Section 5. FIRE FIGHTING MEASURES

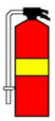
Recommended Extinguishing Media


Water spray or fog. ✓


Foam ✓


Dry chemical powder. ✓


Carbon dioxide. ✗


BCF\ Vaporising Liquid (Where regulations permit). ✓

Extinguishing Media Incompatibilities

- There is no restriction on the type of extinguisher which may be used.
- Use extinguishing media suitable for surrounding area.

Specific Hazards Hazardous Decomposition

- Pollutant
- Non-combustible liquid
- Will not burn, but heat produces highly toxic fumes/vapours.
- Contact with moisture or water may generate heat causing ignition
- Reacts with metals producing flammable / explosive hydrogen gas
- If involved in fire, emits toxic fumes of: sulphur oxides (SOx)
- Acids may react with metals to produce hydrogen, a highly flammable and explosive gas.
- Heating may cause expansion or decomposition leading to violent rupture of containers.

Fire Incompatibility

- Avoid reaction with oxidising agents, alkalis, reducing agents, common metals and their alloys
- Reacts with mild steel, galvanised steel / zinc producing hydrogen gas which may form an explosive mixture with air.

Fire Fighting, Special Protective Equipment & Precautions

- Alert Fire Brigade and tell them location and nature of hazard.
- Wear full body protective clothing with breathing apparatus.
- Prevent, by any means available, spillage from entering drains or water course.
- Use fire fighting procedures suitable for surrounding area.

Section 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions

- Avoid breathing vapours and contact with skin and eyes.

Environmental Precautions

- Prevent, by any means available, spillage from entering drains or water course.

Methods and materials for containment and cleaning up

- Slippery when wet.
- Wear proper protective equipment to prevent skin and eye contact and inhalation of mist.
- Contain using sand, earth, inert material or vermiculite.
- Carefully dilute with water (fine spray or fog) then neutralise with lime or soda ash.
- With a clean shovel, transfer spilled material into clean-labelled containers for disposal.
- Wash area down with excess water.
- Do not allow water to enter containers of acid as a violent reaction may occur.
- Prevent from entering drains, sewers, streams or other bodies of water. If contamination of sewers or waterways has occurred, advise the local emergency services.

Protective Equipment

- Personal Protective Equipment advice is contained in Section 8 of the SDS.

Emergency Procedures

Minor Spills

- Clean up all spills immediately.
- Avoid breathing vapours and contact with skin and eyes.
- Wear fully protective PVC clothing and breathing apparatus.
- Contain and absorb spill with sand, earth, inert material or vermiculite
- Place in a suitable, labelled container for waste disposal.

Major Spills

- Pollutant - contain spillage
- Clear area of personnel and move upwind
- Alert Fire Brigade and tell them location and nature of hazard.
- May be violently or explosively reactive.
- Wear full body protective clothing with breathing apparatus.
- Prevent, by any means available, spillage from entering drains or water and water courses.
- Stop leak if safe to do so.
- Contain spill with sand, earth or vermiculite.
- Collect recoverable product into labelled containers for recycling.
- Neutralise/decontaminate residue (see Section 13 for specific agent).
- Collect solid residues and seal in labelled drums for disposal.
- Wash area and prevent runoff into drains.
- After clean-up operations, decontaminate and launder all protective clothing and equipment before storing and re-using.

- If contamination of drains or waterways occurs, advise emergency services.

Section 7. HANDLING AND STORAGE

Safe Handling

- Avoid all personal contact and wear protective clothing when risk of exposure occurs.
- DO NOT allow clothing wet with material to stay in contact with skin
- Use in a well-ventilated area, avoid generating and breathing mist
- Handle and open container with care and keep containers securely sealed when not in use
- When handling, DO NOT eat, drink or smoke.
- Always wash hands with soap and water after handling. Work clothes should be laundered separately.
- Always wash hands with soap and water after handling. Work clothes should be laundered separately.
- Use good occupational work practice. Observe manufacturer's storage and handling recommendations contained within this SDS.

Storage

- Store in original containers and store in a cool, dry, well-ventilated area away from incompatible materials and foodstuff containers.
- Protect containers against physical damage and check regularly for leaks
- Floors should be covered or coated with acid resistant material.
- DO NOT store in pits, depressions, basements or areas where vapours may be trapped
- Attacks some plastics, rubber and coatings

Suitable container

- Packaging as recommended by manufacturer.
- Check that containers are clearly labelled
- Glass, Polyethylene, Polypropylene or Poly-lined containers are suitable

Storage incompatibility

- Is a strong oxidiser
- Reacts with water or steam
- Reacts violently with many substances including reducing agents, combustible materials, organic substances, alkalis, ammonium tetraperoxochromate, aniline, 1,2-ethanediamine, ethanolamine, isoprene, mesityl oxide, endo--norbanecarboxylic acid ethyl ester, perchlorates, sodium carbonate, zinc chlorate
- Reacts, possibly causing ignition or explosion, with many substances, including non-oxidising mineral acids, organic acids, bases, reducing agents, acetic anhydride, acetone cyanohydrin, acetonitrile, acrolein, acrylates, acrylonitrile, alcohols, aldehydes, alkylene oxides, allyl alcohol, allyl chloride, substituted, allyls, 2-aminoethanol, ammonium hydroxide, bromine pentafluoride, n-butyraldehyde, caprolactam solution, carbides, caesium acetylene carbide, chlorine trifluoride, chlorates, chlorosulfonic acid, cresols, cuprous nitride, diisobutylene, ethylene cyanohydrin, ethylene diamine, ethylene glycol, ethyleneimine, fulminates, glycols, hydrochloric acid, iodine heptafluoride, iron, isocyanates, ketones, lithium silicide, mercuric nitride, 2-methyllactonitrile, powdered metals, nitric acid, p-nitrotoluene, pentasilver trihydroxydiaminophosphate, perchloric acid, phenols, phosphorus, picrates, potassium chlorate, potassium permanganate, beta-propiolactone, propylene oxide, pyridine, rubidium acetylene, silver permanganate, sodium, sodium chlorate, sodium hydroxide, styrene monomer, zinc phosphide
- Increases the explosive sensitivity of nitromethane
- Incompatible with 2-amino-5-nitrothiazole, 2-aminothiazole, ammonia, aliphatic amines, alkanolamines, amides, organic anhydrides, isocyanate, vinyl acetate, alkylene oxides, epichlorohydrin.
- Attacks some plastics, rubber and coatings
- Reacts with metals to produce flammable hydrogen gas

✓ = May be stored together ⓘ = May be stored together with specific preventions ✗ = Must not be stored together

✗ FLAMMABLES ✗ EXPLOSIVES ✓ ACUTE TOXIC ✗ OXIDISERS ✓ HARMFUL ✓ IRRITANT ✓ CORROSIVE

Section 8. EXPOSURE CONTROLS, PERSONAL PROTECTION

AUSTRALIAN EXPOSURE STANDARDS (Occupational Exposure Limits)

Ingredient	Material name	TWA	STEL
Sulphuric Acid (H2SO4)	Sulphuric acid	1 mg/m3	3 mg/m3

APPROPRIATE ENGINEERING CONTROLS

Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.
The basic types of engineering controls are:

- Process controls which involve changing the way a job activity or process is done to reduce the risk.
- Enclosure and / or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment.

PERSONAL PROTECTION: Not normally required; however if in contact with internal components:-

Respirator Type

- Where the concentration of gas / particulates in the breathing zone, approaches or exceeds the "Exposure Standard" (or ES), respiratory protection is required.
- Type E-P Filter of sufficient capacity.

Required Minimum Protection Factor	Half-Face Respirator	Full-Face Respirator	Powered Air Respirator
up to 10 x ES	P1 Air-line*	- -	PAPR-P1 -
up to 50 x ES	Air-line**	P2	PAPR-P2
up to 100 x ES	-	P3	-
		Air-line*	-
100+ x ES	-	Air-line**	PAPR-P3

*** Negative pressure demand**
**** Continuous flow**

Eye Protection

- Safety glasses with unperforated side shields may be used where continuous eye protection is desirable, as in laboratories;
- Spectacles are not sufficient where complete eye protection is needed such as when handling bulk-quantities, where there is a danger of splashing, or if the material may be under pressure.
- Chemical goggles whenever there is a danger of the material coming in contact with the eyes; goggles must be properly fitted.
- Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available.

Clothing

- When handling corrosive liquids, wear trousers or overalls outside of boots, to avoid spills entering boots.
- Overalls or PVC protective suit may be required if exposure severe.

Glove Type

- Wear chemical protective gloves, e.g. PVC

Other Protection

- Eyewash unit.
- Barrier cream.
- Skin cleansing cream.

Foot wear

- Wear safety footwear or safety gumboots e.g. Rubber

Section 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear colourless, mobile liquid that mixes with water.		
Odour	Not Available	**Lower explosive limits**	Not Available
Odour threshold	Not Available	**Vapour pressure (kPa)**	13 to 22 mmHg @ 25 °C
pH	<1	**Vapour density (Air = 1)**	Not Available
Melting point / freezing point (°C)	95 °C / -7 to –70 °C	**Relative density (Water = 1)**	1.2-1.3 (Sulphuric acid electrolyte) @ 25 °C
Initial boiling point and boiling range (°C)	95 °C (Sulphuric acid electrolyte)	**Solubility in water (g,L)**	Immiscible
Flash point	Non-flammable	**Partition coefficient: n-octanol/water**	Not Available
Evaporation rate	Not Available	**Auto-ignition temperature**	Not Available
Flammability	Not Applicable	**Decomposition temperature (°C)**	Not Available
Upper, lower flammability or explosive limits	Not Applicable	**Viscosity**	Not Available

Section 10. STABILITY AND REACTIVITY

Reactivity

See section 7 and this section under Chemical stability

- Is a strong oxidiser
- Reacts violently with many substances including reducing agents, combustible materials, organic substances, alkalis
- Acids often catalyse (increase the rate of) chemical reactions.
- Inorganic acids are generally soluble in water with the release of hydrogen ions. The resulting solutions have pH of less than 7.0.
- The dissolution of inorganic acids in water or the dilution of their concentrated solutions with additional water may generate significant heat.
- The addition of water to inorganic acids often generates sufficient heat in the small region of mixing to cause some of the water to boil explosively. The resulting "bumping" can spatter the acid.

Possibility of hazardous reactions

See section 5 & 7

- Reacts, possibly causing ignition or explosion, with many substances, including non-oxidising mineral acids, phosphorus, picrates, potassium chlorate, potassium permanganate, beta-propiolactone, propylene oxide, pyridine, rubidium acetylene, silver permanganate, sodium, sodium chlorate, sodium hydroxide, styrene monomer, zinc phosphide
- Reacts with mild steel, galvanised steel / zinc, active metals, including such structural metals as aluminium and iron, to release hydrogen, a flammable gas.
- Inorganic acids neutralise chemical bases (for example: amines and inorganic hydroxides) to form salts - neutralisation can generate dangerously large amounts of heat in small spaces.
- Inorganic acids generate flammable and/or toxic gases in contact with dithiocarbamates, isocyanates, mercaptans, nitrides, nitriles, sulphides, and strong reducing agents. Additional gas-generating reactions occur with sulphites, nitrites, thiosulphates (to give H2S and SO3), dithionites (SO2), and even carbonates.
- Reacts with cyanide compounds to release gaseous hydrogen cyanide

Incompatible materials

See section 7

- Avoid heat, sparks , open flame, and other ignition sources
- Avoid storage with oxidisers, alkalis, reducing agents, common metals and their alloys
- Avoid any contamination of this material as it is very reactive and any contamination is potentially hazardous

Chemical stability

- Unstable in the presence of incompatible materials.
- Product is considered stable.
- Hazardous polymerisation will not occur
- Contact with alkaline material liberates heat

Hazardous decomposition products

- See section 5
- Sulphuric acid may decompose to sulphur trioxide, carbon monoxide, sulphuric acid mist, sulphur dioxide and hydrogen.

Section 11. TOXICOLOGICAL INFORMATION ACUTE 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:-

Inhaled

Corrosive acids can cause irritation of the respiratory tract, with coughing, choking and mucous membrane damage. There may be dizziness, headache, nausea and weakness.
Inhalation of aerosols (mists, fumes), generated by the material during the course of normal handling, may produce toxic effects; these may be fatal.
The material can cause respiratory irritation in some persons.

Ingestion

Considered an unlikely route of entry in commercial/industrial environments
Ingestion of acidic corrosives may produce burns around and in the mouth, the throat and oesophagus.
Immediate pain and difficulties in swallowing and speaking may also be evident.
The material is considered to be harmful by all exposure routes
The liquid is highly discomforting and corrosive if swallowed
Ingestion may result in nausea, abdominal irritation, pain and vomiting

Skin contact

Skin contact with acidic corrosives may result in pain and burns; these may be deep with distinct edges and may heal slowly with the formation of scar tissue.
Skin contact is not thought to produce harmful health effects (as classified under EC Directives using animal models). Systemic harm, however, has been identified following exposure of animals by at least one other route and the material may still produce health damage following entry through wounds, lesions or abrasions.
Open cuts, abraded or irritated skin should not be exposed to this material
Entry into the blood-stream, via, cuts, abrasions or lesions, may produce systemic injury with harmful effects.
The liquid is highly discomforting and corrosive to the skin and is capable of causing ulceration and severe burns if exposure is prolonged, even minor exposure is highly discomforting
The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin.

Eye

This material can cause eye irritation and damage in some persons If applied to the eyes, this material causes severe eye damage.
Direct eye contact with acid corrosives may produce pain, tears, sensitivity to light and burns. The material may produce moderate eye irritation leading to inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.
Mild burns of the epithelia generally recover rapidly and completely.

Chronic effects

Repeated or prolonged exposure to acids may result in the erosion of teeth, swelling and/or ulceration of mouth lining.
Irritation of airways to lung, with cough, and inflammation of lung tissue often occurs.
Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.
Principal routes of exposure are usually by skin contact with the material, eye contact and inhalation of vapour.
The material is considered to be harmful by all exposure routes and contact may cause rapid tissue destruction
As with any chemical product, contact with unprotected bare skin; inhalation of vapour, mist or dust in work place atmosphere; or ingestion in any form, should be avoided by observing good occupational work practice

Sulphuric Acid *(undiluted)*

Asthma-like symptoms may continue for months or even years after exposure to the material ceases. This may be due to a non-allergenic condition known as reactive airways dysfunction syndrome (RADS) which can occur following exposure to high levels of highly irritating compound. Key criteria for the diagnosis of RADS include the absence of preceding respiratory disease, in a non-atopic individual, with abrupt onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant. A reversible airflow pattern, on spirometry, with the presence of moderate to severe bronchial hyper-reactivity on methacholine challenge testing and the lack of minimal lymphocytic inflammation, without eosinophilia, have also been included in the criteria for diagnosis of RADS. RADS (or asthma) following an irritating inhalation is an infrequent disorder with rates related to the concentration of and duration of exposure to the irritating substance. Industrial bronchitis, on the other hand, is a disorder that occurs as result of exposure due to high concentrations of irritating substance (often particulate in nature) and is completely reversible after exposure ceases. The disorder is characterised by dyspnoea, cough and mucus production

WARNING: For inhalation exposure ONLY: This substance has been classified by the IARC as Group 1: CARCINOGENIC TO HUMANS
Occupational exposures to strong inorganic acid mists of sulphuric acid:

Acute Toxicity	Skin Irritation / Corrosion	Serious Eye Damage / Irritation	Respiratory Or Skin Sensitisation	Mutagenicity	Carcinogenicity	Reproductivity	Stot - Single Exposure	Stot - Repeated Exposure	Aspiration Hazard
✓	✓	✓	◐	◐	✓	✓	✓	✓	◐

✓= Data required to make classification available ✗= Data available but does not fill the criteria for classification

ⓘ = Data Not Available to make classification

Section 12. ECOLOGICAL INFORMATION

Ecotoxicity

- Prevent, by any means available, spillage from entering drains or water courses.
- DO NOT discharge into sewer or waterways. DO NOT discharge into sewer or waterways.
- May cause long term adverse effects in the environment
- Avoid contaminating waterways. The product is highly acidic. If large spills occurred a water pH drop could be responsible for an environmental effect on aquatic organisms.

Ecotoxicity data for Sulphuric Acid

Mosquito fish	LC50 42mg/L/96hr	Shore crab	LC50 70-80mg/L/48hr
Hooknose fish	LC50 80-90mg/L/48hr	Cockle	LC50 200-500mg/L/48hr

Degradability No Data available for all ingredients

Bio-accumulative Potential No Data available for all ingredients

Mobility in Soil

- During transport through the soil, sulfuric acid can dissolve some of the soil material, in particular carbonate-based materials

Other Adverse Effects No Data available for all ingredients

Section 13. DISPOSAL CONSIDERATIONS

Safe Handling & Disposal

- Dispose in accordance with federal, state or local regulations.

Disposal of Contaminated Packaging

- Containers may still present a chemical hazard/ danger when empty.
- Return to supplier for reuse/ recycling if possible.
- Use soda ash or slaked lime to neutralise

Otherwise:

- If container cannot be cleaned sufficiently well to ensure that residuals do not remain or if the container cannot be used to store the same product, and then puncture containers, to prevent re-use, and bury at an authorised landfill.
- Where possible retain label warnings and SDS and observe all notices pertaining to the product.
- This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use. If it has been contaminated, it may be possible to reclaim the product by filtration, distillation or some other means. Shelf life considerations should also be applied in making decisions of this type. Note that properties of a material may change in use, and recycling or reuse may not always be appropriate.
- DO NOT allow wash water from cleaning or process equipment to enter drains.
- It may be necessary to collect all wash water for treatment before disposal.
- In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.
- Where in doubt contact the responsible authority.
- Recycle wherever possible.
- Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified.
- Treat and neutralise at an approved treatment plant. Treatment should involve: Neutralisation with soda-ash or soda-lime followed by: burial in a land-fill specifically licenced to accept chemical and / or pharmaceutical wastes or Incineration in a licenced apparatus (after admixture with suitable combustible material).
- Decontaminate empty containers with 5% aqueous sodium hydroxide or soda ash, followed by water. Observe all label safeguards until containers are cleaned and destroyed.

Environmental Regulations

- Dispose in accordance with federal, state or local regulations.
- Refer to section 15

Section 14. TRANSPORT INFORMATION

REGULATED FOR TRANSPORT OF DANGEROUS GOODS ADG

UN Number 2796

Proper Shipping Name SULPHURIC ACID with not more than 51% acid or BATTERY FLUID, ACID

Transport Hazard Class Class: 8 **Sub risk:** Not Applicable

Packing group II

Environmental Hazards No relevant data

Special Precautions Not Applicable

Limited quantity 1L

Additional Information Marine Pollutant: Yes

Hazchem Code 2R

Other information Packaging instructions P001

Section 15. REGULATORY INFORMATION

SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS, LEGISLATION

Sulphuric Acid CAS 7664-93-9 is found on the following regulatory Lists

"Australia Exposure Standards", "Australia Inventory of Chemical Substances (AICS)","International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs", "International Air Transport Association (IATA) Dangerous Goods Regulations - Prohibited List Passenger and Cargo Aircraft", "Australia Hazardous Substances Information System - Consolidated Lists"

Poisons Schedule (Australia)	6	**AICS Status**	All the constituents of this product are listed
APVMA Status	Not relevant	**AQIS Status**	Status not relevant
TGA Status	Not relevant		

Other References

ADG Code - Australian Transport of Dangerous Goods
Workplace Exposure Standard for Airborne Contaminants
Approved Criteria for Classifying Hazardous Substances NOHSC: 1008 (2004)
Hazardous Substances Information System (HSIS)
Labelling of Workplace Hazardous Chemicals- Code Of Practice
Preparation of Safety Data Sheets for Hazardous Chemicals- Code of Practice

Section 16. OTHER RELEVANT INFORMATION

Revision Information

Revision No	Date	Description
1	30/10/15	Initial SDS creation
2	11/09/19	Reviewed with minor updates

Abbreviations

AICS	Australia Inventory of Chemical Substances
APVMA	Australian Pesticides and Veterinary Medicines Authority
AQIS	Australian Quarantine and Inspection Service
CAS #	Chemical Abstract Service Number – *used to uniquely identify chemical compounds*
IARC	International Agency for Research on Cancer
LC50	Lethal Concentration- *toxicity of the surrounding medium that will kill half of the sample population of a specific test-animal in a specified period through exposure via inhalation (respiration)*
SDS	Safety Data Sheet- *(SDS), previously called a Material Safety Data Sheet (SDS),*
TGA	Therapeutic Goods Administration