

## Section 1. PRODUCT IDENTIFICATION

<b>Product Name</b>	Valve regulated lead acid (VRLA) battery
<b>Other Names</b>	Electric storage, AGM (Absorbed Glass Mat), Lead Acid Battery-Non-Spillable, Sealed lead acid battery, Golf cart battery, Automotive battery, Battery SMF, Car & truck batteries, Sealed lead-acid rechargeable battery, UPS Battery, Non-Dangerous cargo Battery, Maintenance free battery, Motorcycle battery
<b>Use</b>	Automotive, Industrial Standby Power and Motive Power.
<b>Supplier Name and Address</b>	Century Yuasa Batteries 259 Church St, Onehunga, Auckland 1643
<b>Telephone</b>	0800 93 93 93
<b>Emergency (24 Hours)</b>	(02) 7468 6673
<b>Relevant identified uses</b>	Electrical battery standby. NOTE: Hazard statement relates to battery contents. Potential for exposure should not exist unless the battery leaks, is exposed to high temperatures or is mechanically, physically or electrically abused. Use involves discharge then regenerative charging cycle from external DC power source. CHARGING HAZARD. Completion of charging process includes evolution of highly flammable and explosive hydrogen gas which is readily detonated by electric spark. No smoking or naked lights. Do not attach/detach metal clips or operate open switches during charging process because of arcing/sparking hazard. Overcharging to excess results in vigorous hydrogen evolution - boiling - which may cause generation of corrosive acid mist. Large installations i.e. battery rooms must be constructed of acid resistant materials and well ventilated. The hazard relates to direct contact with the immobilized sulfuric acid contents.

## Section 2. HAZARDS 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** Skin Corrosion/Irritation Category 1A, Serious Eye Damage/Eye Irritation Category 1, Acute Toxicity (Inhalation) Category 4, Carcinogenicity Category 1A, Reproductive Toxicity Category 1B, Reproductive Toxicity Effects on or via Lactation, Hazardous to the Aquatic Environment Acute Hazard Category 3  
\*LIMITED EVIDENCE

**GHS Label Elements**



Corrosive



Warning



Health Hazard

### IN THE EVENT OF THE INTERNAL BATTERY COMPONENTS BEING EXPOSED

<b>Hazard Statements</b>	<b>H314</b> Causes severe skin burns and eye damage	<b>H362</b> May cause harm to breast-fed children.
	<b>H332</b> Harmful if Inhaled	<b>H402</b> Harmful to aquatic life.
	<b>H350</b> May cause cancer	<b>AUH032</b> Contact with acid liberates very toxic gas.
	<b>H360Df</b> May damage fertility or the unborn child Suspected of damaging fertility.	

### IN THE EVENT OF EXPOSURE TO INTERNAL COMPONENTS

<b>Precautionary Statements</b>	<u>Prevention</u>		
	<b>P101</b>	If medical advice is needed, have product container or label at hand.	<b>P102</b> Keep out of reach of children
	<b>P103</b>	Read label before use.	
	<b>P201</b>	Obtain special instructions before use.	<b>P260</b> Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
	<b>P263</b>	Avoid contact during pregnancy and while nursing.	<b>P264</b> Wash all exposed external body areas thoroughly after handling.
	<b>P270</b>	Do not eat, drink or smoke when using this product	<b>P271</b> Use only outdoors or in a well-ventilated area.
	<b>P273</b>	Avoid release to the environment	<b>P280</b> Wear protective gloves /protective clothing/ eye protection/ face protection
	<u>Response</u>		
	<b>P301+P330 +P331</b> IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.	<b>P303+P361+P353</b> IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].	
	<b>P305+P351 +P338</b> IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.	<b>P304+P340</b> IF INHALED: Remove person to fresh air and keep comfortable for breathing.	
	<b>P308+P313</b> IF EXPOSED OR CONCERNED: Get medical advice/attention	<b>P310</b> Immediately call a POISON CENTER/ doctor/ physician/ first aider	

**P363** Wash contaminated clothing before reuse.

**Storage**

**P405** Store locked up

**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 <sub>2</sub> SO <sub>4</sub> )	CAS 7664-93-9	23.95%
Lead (Pb) \ lead compounds	CAS 7439-92-1	69.8%
Tin (Sn)	CAS 7440-31-5	0.45%
Calcium (Ca)	CAS 7440-70-2	0.1%
Fibreglass Separator (O <sub>2</sub> Si)	CAS 65997-17-3	1.1%
Case material :- ABS resin (C <sub>15</sub> H <sub>17</sub> N) Or Polypropylene (C <sub>n</sub> H <sub>2n</sub> )	CAS 9003-56-9  CAS 9003-07-0	4.6%

**Section 4. FIRST AID MEASURES**

**DESCRIPTION OF FIRST AID MEASURES**

**Eye contact**

If this product 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 skin contact occurs:

- 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.

**Inhalation**

If fumes of combustion products are inhaled:

- 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.

**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.

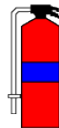
- Skin:**
- Skin lesions require copious saline irrigation.
  - Treat chemical burns as thermal burns with non-adherent gauze and wrapping.
  - Deep second-degree burns may benefit from topical silver sulphadiazine.
- Eye:**
- Eye injuries require retraction of the eyelids to ensure thorough irrigation of the conjunctival 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**

- Water may cause electrical hazard If terminals not protected. .
- Use extinguishing media suitable for surrounding area.

**Specific Hazards Hazardous Decomposition**

- Non-combustible.
- Not considered to be a significant fire risk.
- 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.
- May emit corrosive, poisonous fumes. May emit acrid smoke.
- Decomposition may produce toxic fumes of:
  - carbon monoxide (CO)
  - carbon dioxide (CO<sub>2</sub>)
  - nitrogen oxides (NO<sub>x</sub>)
  - sulphur oxides (SO<sub>x</sub>)
  - metal oxides
  - other pyrolysis products typical of burning organic material.

**Fire Incompatibility**

- Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result

**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.
- Do not approach containers suspected to be hot.
- Cool fire exposed containers with water spray from a protected location.
- If safe to do so, remove containers from path of fire.
- Equipment should be thoroughly decontaminated after use.

## 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**

- 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

- Drains for storage or use areas should have retention basins for pH adjustments and dilution of spills before discharge or disposal of material.
- Check regularly for spills and leaks.
- Clean up all spills immediately.
- Avoid breathing vapours and contact with skin and eyes.

Major Spills

- Clear area of personnel and move upwind.

- 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.

## Section 7. HANDLING AND STORAGE

### Safe Handling (manufacturing)

- Organic powders when finely divided over a range of concentrations regardless of particulate size or shape and suspended in air or some other oxidizing medium may form explosive dust-air mixtures and result in a fire or dust explosion (including secondary explosions)
- Minimise airborne dust and eliminate all ignition sources. Keep away from heat, hot surfaces, sparks, and flame.
- Establish good housekeeping practices.
- Remove dust accumulations on a regular basis by vacuuming or gentle sweeping to avoid creating dust clouds.
- Use continuous suction at points of dust generation to capture and minimise the accumulation of dusts. Particular attention should be given to overhead and hidden horizontal surfaces to minimise the probability of a "secondary" explosion. According to NFPA Standard 654, (not binding in Australia) dust layers 1/32 in.(0.8 mm) thick can be sufficient to warrant immediate cleaning of the area.
- Do not use air hoses for cleaning.
- Minimise dry sweeping to avoid generation of dust clouds. Vacuum dust-accumulating surfaces and remove to a chemical disposal area.
- Vacuums with explosion-proof motors should be used.
- Control sources of static electricity. Dusts or their packages may accumulate static charges, and static discharge can be a source of ignition.
- Solids handling systems must be designed in accordance with applicable standards (e.g. NFPA including 654 and 77) and other national guidance.
- Do not empty directly into flammable solvents or in the presence of flammable vapors.
- The operator, the packaging container and all equipment must be grounded with electrical bonding and grounding systems. Plastic bags and plastics cannot be grounded, and antistatic bags do not completely protect against development of static charges.
- Empty containers may contain residual dust which has the potential to accumulate following settling. Such dusts may explode in the presence of an appropriate ignition source.
- Do NOT cut, drill, grind or weld such containers.
- In addition ensure such activity is not performed near full, partially empty or empty containers without appropriate workplace safety authorisation or permit.
- Protect from accidental short-circuit.

### Conditions for Safe Storage Includes Incompatible

- Avoid contact with moisture.
- Store in original containers.
- Keep containers securely sealed.
- Store in a cool, dry, well-ventilated area.
- Store away from incompatible materials and foodstuff containers.
- No smoking, naked lights, heat or ignition sources.

### Suitable container for Battery contents

**DO NOT use aluminium or galvanised containers**

- Check regularly for spills and leaks
- Lined metal can, lined metal pail/ can.
- Plastic pail.
- Polyliner drum.
- Packing as recommended by manufacturer.
- Check all containers are clearly labelled and free from leaks.

For low viscosity materials

- Drums and jerricans must be of the non-removable head type.
- Where a can is to be used as an inner package, the can must have a screwed enclosure.

For materials with a viscosity of at least 2680 cSt. (23 deg. C) and solids (between 15 C deg. and 40 deg C.):

- Removable head packaging;
- Cans with friction closures and low pressure tubes and cartridges may be used.
- Where combination packages are used, and the inner packages are of glass, porcelain or stoneware, there must be Sufficient inert cushioning material in contact with inner and outer packages unless the outer packaging is a close fitting moulded plastic box and the substances are not incompatible with the plastic.

### Storage incompatibility contents of battery

- Normally packed with inert cushioning material.

✓ = May be stored together

ⓘ = May be stored together with specific precautions

✗ = 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 (H <sub>2</sub> SO <sub>4</sub> )	Sulphuric acid	1 mg/m <sup>3</sup>	3 mg/m <sup>3</sup>
Lead (Pb) \ Lead compounds	Lead, inorganic dusts & fumes (as Pb)	0.05 mg/m <sup>3</sup>	Not Available
Tin (Sn)	Tin	2 mg/m <sup>3</sup>	Not Available
Calcium (Ca)	Calcium		
Fibreglass Separator (O2Si)			
Case material :- ABS resin (C15H17N)	Acrylonitrile Butadiene Styrene		
or			
Polypropylene (C <sub>n</sub> H <sub>2n</sub> )	Polypropylene		

### 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



#### Respirator Type

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

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

Required Minimum Protection Factor	Half-Face Respirator	Full-Face Respirator	Powered Air Respirator
up to 10 x ES	E-AUS P2	-	E-PAPR-AUS / Class 1 P2
up to 50 x ES	-	E-AUS / Class 1 P2	-
up to 100 x ES	-	E-2 P2	E-PAPR-2 P2 ^

^ - Full-face

E = Sulfur dioxide(SO<sub>2</sub>),



#### Eye Protection

- Safety glasses with side shields.
- Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants.



#### Clothing

- Overalls.



#### Footwear

- Wear safety footwear or safety gumboots



#### Glove Type

- Wear Elbow length chemical protective gloves, e.g. PVC.



#### Other Protection

- PVC protective suit may be required if exposure severe.
- Eyewash unit

## Section 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance** Coloured solid with no odour; insoluble in water.

**Odour** No Odour

**Odour threshold** Not Available

**pH** Not Applicable

**Melting point/ freezing point (°C)** Not Applicable

**Initial boiling point and boiling range (°C)** Not Applicable

**Flash point** Not Applicable

**Lower explosive limits** Not Applicable

**Vapour pressure (kPa)** Not Available

**Vapour density (Air = 1)** Not Applicable

**Relative density (Water = 1)** Not Available

**Solubility in water (g,L)** Immiscible

**Partition coefficient: n-octanol/water** Not Available

<b>Evaporation rate</b>	Not Applicable	<b>Auto-ignition temperature</b>	Not Applicable
<b>Flammability</b>	Not Applicable	<b>Decomposition temperature (°C)</b>	Not Available
<b>Upper explosive limits</b>	Not Applicable	<b>Viscosity</b>	Not Available

## Section 10. STABILITY AND REACTIVITY

<b>Reactivity</b>	See section 7 <ul style="list-style-type: none"> <li>Contact with alkaline material liberates heat</li> </ul>	<b>Chemical stability</b>	<ul style="list-style-type: none"> <li>Contact with alkaline material liberates heat</li> <li>Product is considered stable under normal handling conditions.</li> <li>Stable under normal storage conditions.</li> <li>Hazardous polymerization will not occur.</li> </ul>
<b>Possibility of hazardous reactions</b>	See section 7	<b>Conditions to avoid</b>	See section 7
<b>Incompatible materials</b>	See section 7	<b>Hazardous decomposition products</b>	See section 5

## Section 11. TOXICOLOGICAL INFORMATION

<b>Inhaled</b>	<ul style="list-style-type: none"> <li>Inhalation of vapours or aerosols (mists, fumes), generated by the material during the course of normal handling, may produce toxic effects.</li> <li>Corrosive acids can cause irritation of the respiratory tract, with coughing, choking and mucous membrane damage. There may be dizziness, headache, nausea and weakness.</li> </ul>
<b>Ingestion</b>	<ul style="list-style-type: none"> <li>Accidental ingestion of the material may be harmful; animal experiments indicate that ingestion of less than 150 gram may be fatal or may produce serious damage to the health of the individual.</li> <li>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.</li> </ul>
<b>Skin contact</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.</li> </ul>
<b>Eye</b>	<ul style="list-style-type: none"> <li>If applied to the eyes, this material causes severe eye damage.</li> <li>Direct eye contact with acid corrosives may produce pain, tears, sensitivity to light and burns. Mild burns of the epithelia generally recover rapidly and completely</li> </ul>
<b>Immediate effects</b>	<ul style="list-style-type: none"> <li>As above</li> </ul>
<b>Chronic effects</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Substance accumulation, in the human body, is likely and may cause some concern following repeated or long-term occupational exposure.</li> <li>Harmful: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.</li> </ul>

### Sulphuric Acid:

- 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. Occupational exposures to strong inorganic acid mists of sulphuric acid:

### Lead:

WARNING: Lead is a cumulative poison and has the potential to cause abortion and intellectual impairment to unborn children of pregnant workers.

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

<b>Ecotoxicity</b>	<ul style="list-style-type: none"> <li>Prevent, by any means available, spillage from entering drains or water courses.</li> <li>DO NOT discharge into sewer or waterways.</li> </ul>
<b>Degradability</b>	<ul style="list-style-type: none"> <li>No Data available for all ingredients</li> </ul>
<b>Bio-accumulative Potential</b>	<ul style="list-style-type: none"> <li>No Data available for all ingredients</li> </ul>
<b>Mobility in Soil</b>	<ul style="list-style-type: none"> <li>No Data available for all ingredients</li> </ul>

**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** • 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: Mixing or slurring in water; Neutralisation 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.
- Environmental Regulations** • Refer to section 15

## Section 14. TRANSPORT INFORMATION

### REGULATED FOR TRANSPORT OF DANGEROUS GOODS ADG

<b>UN Number</b>	2800
<b>Proper Shipping Name</b>	BATTERIES, WET, NON-SPILLABLE, electric storage
<b>Transport Hazard Class</b>	Class: 8 <b>Sub risk:</b> Not Applicable
<b>Packing group</b>	Not Applicable
<b>Environmental Hazards</b>	No relevant data
<b>Special Precautions</b>	Special provisions    238 Limited quantity      1 L
<b>Additional Information</b>	Marine Pollutant: = NO
<b>Hazchem Code</b>	2R
<b>Other Information</b>	



## Section 15. REGULATORY INFORMATION

### SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS, LEGISLATION

This substance is to be managed using the conditions specified in the applicable Group Standard

<b>HSR002491</b>	Additives, Process Chemicals and Raw Materials (Corrosive) Group Standard 2006
<b>HSR002493</b>	Additives, Process Chemicals and Raw Materials (Corrosive, Toxic [6.7]) Group Standard 2006
<b>HSR002504</b>	Additives, Process Chemicals and Raw Materials (Toxic [6.1 + 6.7]) Group Standard 2006
<b>HSR002508</b>	Additives, Process Chemicals and Raw Materials (Toxic [6.1]) Group Standard 2006
<b>Lead (7439-92-1) is found on the following regulatory lists</b>	"International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs", "New Zealand Inventory of Chemicals (NZIoC), New Zealand Workplace Exposure Standards", New Zealand Hazardous and New Organisms (HSNO) Act – Classification of Chemicals"
<b>Sulphuric Acid CAS 7664-93-9 is found on the following regulatory Lists</b>	"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", "New Zealand Inventory of Chemicals (NZIoC), New Zealand Workplace Exposure Standards", New Zealand Hazardous and New Organisms (HSNO) Act – Classification of Chemicals"
<b>Location Test Certificate</b>	Subject to Regulation 55 of the Hazardous Substances (Classes 1 to 5 Controls) Regulations, a location test certificate is required when quantity greater than or equal to those indicated below are present
<b>Hazard Class</b>	Not applicable
<b>Quantity beyond which controls apply for closed containers</b>	Not applicable
<b>Quantity beyond which controls apply when use occurring in open containers</b>	Not applicable
<b>Approved Handler</b>	Subject to Regulation 9 of the Hazardous Substances (Classes 6, 8, and 9 Controls) Regulations, the substance must be under the personal control of an Approved Handler when present in a quantity greater than or equal to those indicated below
<b>Class of Substance</b>	<b>Quantities</b>
6.1	Any quantity
6.7A	10 kg or more, if solid 10 L or more, if liquid
8.1A	N/A
8.2A	Any quantity
9.1A, 9.2A, 9.3A	Any quantity

**Section 16.**

Revision Information	Revision N°	Date	Description
	ETQ 01	28/06/24	New document

**Abbreviations**

CAS #	Chemical Abstract Service Number – used to uniquely identify chemical compounds
IARC	International Agency for Research on Cancer
HSNO	Hazardous Substances and New Organisms ((HSNO) Act
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 (MSDS),
TGA	Therapeutic Goods Administration
CAS #	Chemical Abstract Service Number – used to uniquely identify chemical compounds