

Section 1. PRODUCT IDENTIFICATION

Product Name	Valve regulated lead acid (VRLA) battery
Other Names	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
Use	Automotive, Industrial Standby Power and Motive Power.
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	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

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

IN THE EVENT OF EXPOSURE TO INTERNAL COMPONENTS

Precautionary Statements	<u>Prevention</u>		
	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.		
	P201 Obtain special instructions before use.	P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.	
	P263 Avoid contact during pregnancy and while nursing.	P264 Wash all exposed external body areas thoroughly after handling.	
	P270 Do not eat, drink or smoke when using this product	P271 Use only outdoors or in a well-ventilated area.	
	P273 Avoid release to the environment	P280 Wear protective gloves /protective clothing/ eye protection/ face protection	
	<u>Response</u>		
	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].	
	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.	
	P308+P313 IF EXPOSED OR CONCERNED: Get medical advice/attention	P310 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 ₂ SO ₄)	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 ₂ Si)	CAS 65997-17-3	1.1%
Case material :- ABS resin (C ₁₅ H ₁₇ N) Or Polypropylene (C _n H _{2n})	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.

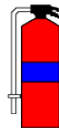
- Skin:**
- Skin lesions require copious saline irrigation.
 - Treat chemical burns as thermal burns with non-adherent gauze and wrapping.
 - Deep second-degree burns may benefit from topical silver sulphadiazine.
- Eye:**
- Eye injuries require retraction of the eyelids to ensure thorough irrigation 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 (CO₂)
 - nitrogen oxides (NO_x)
 - sulphur oxides (SO_x)
 - 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 ₂ SO ₄)	Sulphuric acid	1 mg/m ³	3 mg/m ³
Lead (Pb) \ Lead compounds	Lead, inorganic dusts & fumes (as Pb)	0.05 mg/m ³	Not Available
Tin (Sn)	Tin	2 mg/m ³	Not Available
Calcium (Ca)	Calcium		
Fibreglass Separator (O ₂ Si)			
Case material :- ABS resin (C15H17N)	Acrylonitrile Butadiene Styrene		
or			
Polypropylene (C _n H _{2n})	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(SO₂),



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

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

Section 10. STABILITY AND REACTIVITY

Reactivity	See section 7	Chemical stability	<ul style="list-style-type: none"> Contact with alkaline material liberates heat Contact with alkaline material liberates heat Contact with alkaline material liberates heat Contact with alkaline material liberates heat
Possibility of hazardous reactions	See section 7	Conditions to avoid	See section 7
Incompatible materials	See section 7	Hazardous decomposition products	See section 5

Section 11. TOXICOLOGICAL INFORMATION

Inhaled	<ul style="list-style-type: none"> Inhalation of vapours or aerosols (mists, fumes), generated by the material during the course of normal handling, may produce toxic effects. Corrosive acids can cause irritation of the respiratory tract, with coughing, choking and mucous membrane damage. There may be dizziness, headache, nausea and weakness.
Ingestion	<ul style="list-style-type: none"> 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. 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.
Skin contact	<ul style="list-style-type: none"> 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. 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.
Eye	<ul style="list-style-type: none"> 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. Mild burns of the epithelia generally recover rapidly and completely
Immediate effects	<ul style="list-style-type: none"> As above
Chronic effects	<ul style="list-style-type: none"> 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, is likely and may cause some concern following repeated or long-term occupational exposure. Harmful: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.

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

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

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

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



The Australian Dangerous Goods Code (7th Edition) Special Provision 238 allows Century Yuasa Batteries Pty. Ltd. to transport non-spillable batteries as sold by the company by road and rail as non-dangerous goods. In addition, these batteries are certified as complying with UN2800 Special Provision A67 of the International Air Transport Association (IATA) Dangerous Goods Regulations. Refer to Century Yuasa Batteries office for further information.

Section 15. REGULATORY INFORMATION

SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS, LEGISLATION

- Sulphuric Acid** Is found on the following regulatory Lists
 Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals, Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 6, Australian Inventory of Industrial Chemicals (AIIC) Chemical Footprint Project - Chemicals of High Concern List, International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs, International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Group 1: Carcinogenic to humans
- Lead**
 Is found on the following regulatory Lists
 Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals, Australian Inventory of Industrial Chemicals (AIIC), Chemical Footprint Project - Chemicals of High Concern List, International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs, International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Group 1: Carcinogenic to humans, International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Group 2B: Possibly carcinogenic to humans, International WHO List of Proposed Occupational Exposure Limit (OEL) Values for Manufactured Nanomaterials (MNMS)
- styrene/ butadiene/ acrylonitrile copolymer** is found on the following regulatory lists
 Australian Inventory of Industrial Chemicals (AIIC), International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Not Classified as Carcinogenic, International WHO List of Proposed Occupational Exposure Limit (OEL) Values for Manufactured Nanomaterials (MNMS)
- Tin** is found on the following regulatory lists
 Australian Inventory of Industrial Chemicals (AIIC), International WHO List of Proposed Occupational Exposure Limit (OEL) Values for Manufactured Nanomaterials (MNMS)
- Calcium** is found on the following regulatory lists
 Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
 Australian Inventory of Industrial Chemicals (AIIC)

Section 16. OTHER RELEVANT INFORMATION

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

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 – <i>used to uniquely identify chemical compounds</i>
IARC	International Agency for Research on Cancer
LC50	Lethal Concentration- <i>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)</i>
SDS	Safety Data Sheet- (SDS), <i>previously called a Material Safety Data Sheet (MSDS)</i> ,