

1. PRODUCT IDENTIFICATION

Product Name	Lead Sludge
Other Names	Lead Scrap (Battery Manufacturing) – Lead Sludge
Use	Waste by-product of the manufacturing of 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	Recycling

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 Acute Toxicity (Oral) Category 4, Acute Toxicity (Inhalation) Category 4, Reproductive Toxicity Category 1B, STOT - RE Category 2, Acute Aquatic Hazard Category 1, Chronic Aquatic Hazard Category 1

GHS Label Elements



Harmful



Health Hazard



Environment

Hazard Statements	H302	Harmful if swallowed	H373	May cause damage to organs through prolonged or repeated exposure
	H332	Harmful if inhaled	H400	Very toxic to aquatic life
	H360	May damage fertility or the unborn child	H410	Very toxic to aquatic life with long lasting effects

Precautionary Statements

Prevention

Response

P101	If medical advice is needed, have product container or label at hand.	P308+P313	IF EXPOSED: or concerned: Get medical advice / attention.
P102	Keep out of reach of children	P314	Get medical advice / attention if you feel unwell.
P103	Read label before use.	P301+P312	IF SWALLOWED: Call a POISON CENTER / doctor / physician / first aider / if you feel unwell.
P201	Obtain special instructions before use.	P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P260	Do not breathe dust / fume / gas / mist / vapours / spray.	P391	Collect spillage.
P270	Do not eat, drink or smoke when using this product.	<u>Storage</u>	
P271	Use only outdoors or in a well-ventilated area.	P405	Store locked up.
P273	Avoid release to the environment	<u>Disposal</u>	
P280	Wear protective gloves / protective clothing / eye protection / face protection	P501	Dispose of contents, container to authorised chemical landfill or if organic, to high temperature incineration

3. COMPOSITION, INFORMATION ON INGREDIENTS

Ingredient	Identification	Content % weight
Tribasic Lead Sulphate (Pb ₃ SO ₇)	CAS 12202-17-04	85%
Water (H ₂ O)	CAS 7732-18-5	15%

4. FIRST AID MEASURES

DESCRIPTION OF FIRST AID MEASURES

Eye contact

If this product comes in contact with the eyes:

- Wash out immediately with fresh 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.
- Seek medical attention without delay; if pain persists or recurs seek medical attention.
- Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

Skin contact

If skin contact occurs:

- Immediately remove all contaminated clothing, including footwear.
- Flush skin and hair with running water (and soap if available).
- Seek medical attention in event of irritation.

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.

Ingestion

- IF SWALLOWED, REFER FOR MEDICAL ATTENTION, WHERE POSSIBLE, WITHOUT DELAY.
- For advice, contact a Poisons Information Centre or a doctor.
- Urgent hospital treatment is likely to be needed.
- In the meantime, qualified first-aid personnel should treat the patient following observation and employing supportive measures as indicated by the patient's condition.
- If the services of a medical officer or medical doctor are readily available, the patient should be placed in his / her care and a copy of the SDS should be provided. Further action will be the responsibility of the medical specialist.
- If medical attention is not available on the worksite or surroundings send the patient to a hospital together with a copy of the SDS.
- Where medical attention is not immediately available or where the patient is more than 15 minutes from a hospital or unless instructed otherwise:
- INDUCE vomiting with fingers down the back of the throat, ONLY IF CONSCIOUS. Lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.
- NOTE: Wear a protective glove when inducing vomiting by mechanical means.

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

Treat symptomatically.

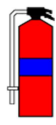
- Gastric acids solubilise lead and its salts and lead absorption occurs in the small bowel.
- Particles of less than 1 um diameter are substantially absorbed by the alveoli following inhalation.
- Lead is distributed to the red blood cells and has a half-life of 35 days. It is subsequently redistributed to soft tissue & bone-stores or eliminated. The kidney accounts for 75% of daily lead loss; integumentary and alimentary losses account for the remainder.
- Neurasthenic symptoms are the most common symptoms of intoxication. Lead toxicity produces a classic motor neuropathy. Acute encephalopathy appears infrequently in adults. Diazepam is the best drug for seizures.
- Whole-blood lead is the best measure of recent exposure; free erythrocyte protoporphyrin (FEP) provides the best screening for chronic exposure. Obvious clinical symptoms occur in adults when whole-blood lead exceeds 80 ug / dL.
- British anti-lewisite is an effective antidote and enhances faecal and urinary excretion of lead. The onset of action of BAL is about 30 minutes and most of the chelated metal complex is excreted in 4-6 hours, primarily in the bile. Adverse reaction appears in up to 50% of patients given BAL in doses exceeding 5 mg / kg. CaNa2EDTA has also been used alone or in concert with BAL as an antidote. D-penicillamine is the usual oral agent for mobilisation of bone lead; its use in the treatment of lead poisoning remains investigational. 2,3-dimercapto-1-propanesulphonic acid (DMPS) and dimercaptosuccinic acid (DMSA) are water soluble analogues of BAL and their effectiveness is undergoing review. As a rule, stop BAL if lead decreases below 50 ug / dL; stop; CaNa2EDTA if blood lead decreases below 40 ug / dL or urinary lead drops below 2 mg / 24hrs.

5. FIRE FIGHTING MEASURES

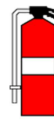
Recommended Extinguishing Media



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

- Non-combustible.
- Not considered a significant fire risk, however containers may burn. Decomposition may produce toxic fumes of sulphur oxides (SOx), metal oxides. May emit poisonous fumes

Fire Incompatibility

- None known.

Fire Fighting, Special Protective Equipment & Precautions

- Alert Fire Brigade and tell them location and nature of hazard.
- Wear breathing apparatus plus protective gloves.
- Prevent, by any means available, spillage from entering drains or water courses.
- 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.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions

- Avoid 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.
- 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 contact with skin and eyes.
- Control personal contact with the substance, by using protective equipment.
- Use dry clean up procedures and avoid generating dust.
- Place in a suitable, labelled container for waste disposal.

Major Spills

- Remove all ignition sources.
- Clean up all spills immediately.
- Avoid contact with skin and eyes.
- Control personal contact with the substance, by using protective equipment.
- Clear area of personnel and move upwind.
- Alert Fire Brigade and tell them location and nature of hazard.
- Wear breathing apparatus plus protective gloves.
- Prevent, by any means available, spillage from entering drains or water courses.
- Stop leak if safe to do so.
- Contain or absorb spill with sand, earth or vermiculite.
- Collect recoverable product into labelled containers for recycling.
- 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, other related regulatory authorities such as environmental protection and local council.

7. HANDLING AND STORAGE

Safe Handling

- Avoid all personal contact, including inhalation.
- Wear protective clothing when risk of exposure occurs.
- Use in a well-ventilated area.
- DO NOT allow material to contact humans, exposed food or food utensils.
- When handling, DO NOT eat, drink or smoke.
- Keep containers securely sealed when not in use.
- Avoid physical damage to containers.
- Always wash hands with soap and water after handling.
- Work clothes should be laundered separately. Launder contaminated clothing before re-use.
- Use good occupational work practice.

- Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained.
- Storage**
- Store in original containers.
 - Keep containers securely sealed.
 - Store in a cool, dry, well-ventilated area.
 - Store away from incompatible materials and foodstuff containers.
 - Protect containers against physical damage and check regularly for leaks.
- Suitable container**
- Packing of product in light weight metal or plastic packages may result in container collapse with product release
 - Lined metal can, lined metal pail / can.
 - Plastic pail.
 - Poly-lined drum.
 - Check all containers are clearly labelled and free from leaks.
 - 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
- Storage incompatibility**
- Lead sulphate must be stored to avoid contact with oxidizers (such as perchlorates, peroxides, permanganates, chlorates, and nitrates) and chemically active metals (such as potassium, sodium, magnesium, and zinc) since violent reactions occur ... A regulated, marked area should be established with this chemical is handled, used, or stored

✓ = May be stored together

ⓘ = May be stored together with specific preventions

✗ = Must not be stored together



✗

FLAMMABLES



✗

EXPLOSIVES



✓

ACUTE TOXIC



✗

OXIDISERS



✓

HARMFUL



✓

IRRITANT



✓

CORROSIVE

8. EXPOSURE CONTROLS, PERSONAL PROTECTION

AUSTRALIAN EXPOSURE STANDARDS (Occupational Exposure Limits)

Ingredient	Material name	TWA	STEL
Tribasic Lead Sulphate (Pb ₄ SO ₇)	Lead, inorganic dusts & fumes (as Pb)	0.15 mg/m ³	Not Available
Water (H ₂ O)	N/A	N/A	Not Available

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

- 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

Other Protection

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



Eye Protection

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



Glove Type

- Wear chemical protective gloves, e.g. PVC



Clothing

- Overalls.



Foot wear

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



EMERGENCY SHOWER AND EYE WASH
FOR CHEMICAL SPILLS - RINSE FOR 15 MIN
PLEASE DO NOT REMOVE

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Grey/White heavy crystalline powder; Does not mix well with water. Practically insoluble in cold water. More soluble in dilute hydrochloric or nitric acids.		
Odour	Not Available	Vapour pressure (kPa)	1 mm Hg @ 973 °C
Odour threshold	Not Available	Vapour density (Air = 1)	Not Applicable
pH	Not Applicable	Relative density (Water = 1)	6.2
Melting point / freezing point (°C)	1087 °C	Solubility in water (g,L)	Immiscible
Initial boiling point and boiling range (°C)	Not Available	Partition coefficient: n-octanol / water	Not Available
Flash point	Not Applicable	Molecular weight (g / mol)	303.28 g / mol
Evaporation rate	Not Available	Decomposition temperature (°C)	>500-700 °C lead fumes given off
Flammability	Not Applicable	Viscosity	Not Available
Upper, lower flammability or explosive limits	Not Applicable		

10. STABILITY AND REACTIVITY

Reactivity	See section 7 and this section under Chemical stability <ul style="list-style-type: none"> Attacks some plastics, rubber and coatings
Possibility of hazardous reactions	See section 5 & 7 <ul style="list-style-type: none"> Reacts explosively with 90% performic acid, rubidium acetylide Reacts violently with strong oxidisers, Reacts violently with aluminium, sodium, zirconium, titanium, boron or silicon, when heated forms impact sensitive explosive mixtures with dichloromethylsilane
Incompatible materials	See section 7 <ul style="list-style-type: none"> Is incompatible with aluminium carbide, barium sulphide, silicon, sulphuryl chloride, hydrogen peroxide, chemical active metals, aluminium, combustible materials, lithium carbide, chlorinated rubber, chlorine, boron, hydrides, ethylene, fluorine, sulphides, acetylides and strong reducing agents.
Chemical stability	<ul style="list-style-type: none"> Product is considered stable Hazardous polymerisation will not occur. Unstable in the presence of incompatible materials
Hazardous decomposition products	See section 5 <ul style="list-style-type: none"> Thermal decomposition may produce oxides of lead.

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	<p>The material is not thought to produce either adverse health effects or irritation of the respiratory tract following inhalation (as classified by EC Directives using animal models). Nevertheless inhalation of dusts, or fumes, especially for prolonged periods, may produce respiratory discomfort and occasionally, distress. Adverse systemic effects have been produced following exposure of animals by at least one other route and good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting. Persons with impaired respiratory function, airway diseases and conditions such as emphysema or chronic bronchitis, may incur further disability if excessive concentrations of particulate are inhaled.</p> <p>Inhalation of dusts, generated by the material, during the course of normal handling, may be harmful. If prior damage to the circulatory or nervous systems has occurred or if kidney damage has been sustained, proper screenings should be conducted on individuals who may be exposed to further risk if handling and use of the material result in excessive exposures.</p>
Ingestion	<p>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.</p> <p>Sulphates are not well absorbed orally, but can cause diarrhoea.</p>
Skin contact	<p>The material is not thought to be a skin irritant (as classified by EC Directives using animal models). Abrasive damage however, may result from prolonged exposures.</p> <p>Skin contact with the material may damage the health of the individual; systemic effects may result following absorption. Open cuts, abraded or irritated skin should not be exposed to this material. 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.</p>
Eye	<p>Although the material is not thought to be an irritant (as classified by EC Directives), direct contact with the eye may cause transient discomfort characterised by tearing or conjunctival redness (as with windburn). Slight abrasive damage may also result.</p>
Chronic effects	<ul style="list-style-type: none"> 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. This material can cause serious damage if one is exposed to it for long periods. It can be assumed that it contains a substance which can produce severe defects.

Document	SDS-02121
Rev No.	1
Date	29/10/15
Page	6 of 8

- Ample evidence exists that developmental disorders are directly caused by human exposure to the material.
- Ample evidence from experiments exists that there is a suspicion this material directly reduces fertility.
- There is some evidence that inhaling this product is more likely to cause a sensitisation reaction in some persons compared to the general population.
- Long term exposure to high dust concentrations may cause changes in lung function i.e. pneumoconiosis; caused by particles less than 0.5 micron penetrating and remaining in the lung.
- Lead, in large amounts, can affect the blood, nervous system, heart, glands, immune system and digestive system. Anaemia may occur.
- Lead can cross the placenta, and cause miscarriage, stillbirths and birth defects.
- Exposure before birth can cause mental retardation, behavioural disorders and infant death.
- Exposure to the material for prolonged periods may cause physical defects in the developing embryo (teratogenesis).
- Lead can accumulate in the skeleton for a very long time.

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

12. ECOLOGICAL INFORMATION

Toxicity

- DO NOT discharge into sewer or waterways.
- Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.
- Do NOT allow product to come in contact with surface waters or to intertidal areas below the mean high water mark.
- Do not contaminate water when cleaning equipment or disposing of equipment wash-waters.
- Wastes resulting from use of the product must be disposed of on site or at approved waste sites.

For Inorganic Sulphate:

- Environmental Fate: Sulphates can produce a laxative effect at concentrations of 1000 - 1200 mg/litre, but no increase in diarrhoea, dehydration or weight loss. The presence of sulphate in drinking-water can also result in a noticeable taste. Sulphate may also contribute to the corrosion of distribution systems. No health-based guideline value for sulphate in drinking water is proposed.
- Atmospheric Fate: Sulphates are removed from the air by both dry and wet deposition processes. Wet deposition processes including rain-out (a process that occurs within the clouds) and washout (Removal by precipitation below the clouds) which contribute to the removal of sulphate from the atmosphere.
- Terrestrial Fate: Soil - In soil, the inorganic sulphates can adsorb to soil particles or leach into surface water and groundwater. Plants - Sodium sulphate is not very toxic to terrestrial plants however; sulphates can be taken up by plants and be incorporated into the parenchyma of the plant. Some plants (e.g. corn and Kochia Scoparia) are capable of accumulating sulphate to concentrations that are potentially toxic to ruminants. Jack pine is the most sensitive plant species.
- Aquatic Fate: Sulphate in water can also be reduced by sulphate bacteria (Thiobacilli) which use them as a source of energy. In anaerobic environments sulphate is biologically reduced to (hydrogen) sulphide by sulphate reducing bacteria, or incorporated into living organisms as source of sulphur. Sodium sulphate is not reactive in aqueous solution at room temperature. Sodium sulphate will completely dissolve, ionize and distribute across the entire planetary "aqua-sphere". Some sulphates may eventually be deposited with the majority of sulphates participating in the sulphur cycle in which natural and industrial sodium sulphates are not distinguishable.
- Ecotoxicity: Significant bioconcentration or bioaccumulation is not expected. Algae are the most sensitive to sodium sulphate and toxicity occurs in bacteria from 2500mg/L. Sulphates are not acutely toxic to fish or invertebrates.
- Daphnia magna water fleas and fathead minnow appear to be the least sensitive species. Activated sludge showed a very low sensitivity to sodium sulphate. Overall it can be concluded that sodium sulphate has no acute adverse effect on aquatic and sediment dwelling organisms. No data were found for long term toxicity.

For Lead:

- Environmental Fate: Lead is assessed as low hazard if it remains in its solid, massive, metallic form. Lead, in the form of alkyls, has been introduced to the environment primarily from leaded gasoline / petrol. These are converted to water-soluble lead compounds of high toxicity and availability to plants.
- Atmospheric Fate: Lead is primarily an atmospheric pollutant that enters soil and water as fallout, a process determined by the physical form involved and particle size. Lead, in the form of alkyls, has been introduced to the environment primarily from leaded gasoline / petrol. Lead is absorbed by mammals / humans via vapors, contaminated dust, and fumes.
- Terrestrial Fate: Soil - Lead alkyls easily leach from soil to contaminate water sources close to highways. Plants - Lead alkyls that have been converted to water soluble lead compounds have high toxicity / availability to plants.
- Aquatic Fate: Lead that has entered the aquatic system is expected to be found in sediments.
- Ecotoxicity: Soluble or insoluble lead may enter the environment and accumulate. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Fish

The following applies to lead compounds in general: fish: lethal from 1.4 mg / l up S. gairdnerii: LC50: 0.14 mg / l / 96h L. idus LC50: 546 mg / l fish test LC50: 236 mg / l (calc. as free lead).

Daphnia

The following applies to lead compounds in general: fish: lethal from 1.4 mg / l up S. gairdnerii: LC50: 0.14 mg / l / 96h L. idus LC50: 546 mg / l fish test LC50: 236 mg / l (calc. as free lead).

Algae

The following applies to lead compounds in **Bacteria**

The following applies to lead compounds in

Document	SDS-02121
Rev No.	1
Date	29/10/15
Page	7 of 8

general: algae: Sc. quadricauda toxic from 3.7 mg / l up M. aeruginosa 0.45 mg / l (calc. as free lead).

general: algae: Sc. quadricauda toxic from 3.7 mg / l up M. aeruginosa 0.45 mg / l (calc. as free lead).

Other Organisms	dermal (rat) LD50: >2000 mg/kg[2] Inhalation (rat) LC50: >5.05 mg/l4 h[2] Oral (rat) LD50: >2000 mg/kg[2]
Degradability	No Data available for all ingredients
Bio-accumulative Potential	No Data available for all ingredients
Mobility in Soil	No Data available for all ingredients
Other Adverse Effects	No Data available for all ingredients

[1]= as cited in the ECOTOX database. Available from, as of October 30, 2009: http://cfpub.epa.gov/ecotox/quick_query.htm [2]= Value obtained from Europe ECHA Registered Substances - Acute toxicity

13. DISPOSAL CONSIDERATIONS

Safe Handling & Disposal	<ul style="list-style-type: none"> Dispose in accordance with federal, state or local regulations.
Disposal of Contaminated Packaging	<ul style="list-style-type: none"> Containers may still present a chemical hazard / danger when empty. Return to supplier for reuse / recycling if possible. <p><u>Otherwise:</u></p> <ul style="list-style-type: none"> 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. Legislation addressing waste disposal requirements may differ by country, state and / or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked. This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use. 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. In most instances the supplier of the material should be consulted. 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 or consult manufacturer for recycling options. Consult State Land Waste Management Authority for disposal. Bury residue in an authorised landfill. Recycle containers if possible, or dispose of in an authorised landfill. Observe all label safeguards until containers are cleaned and destroyed.
Environmental Regulations	<ul style="list-style-type: none"> Dispose in accordance with federal, state or local regulations. Refer to section 15

14. TRANSPORT INFORMATION

REGULATED FOR TRANSPORT OF DANGEROUS GOODS ADG

UN Number	2291	
Proper Shipping Name	LEAD COMPOUND, SOLUBLE, N.O.S.	
Transport Hazard Class	Class: 6.1	Sub risk: Not Applicable
Packing group	III	
Environmental Hazards	No relevant data	
Special Precautions	Special provisions	199, 274
	Limited quantity	5 kg
Additional Information	Marine Pollutant: Yes	
Hazchem Code	Z2	



15. REGULATORY INFORMATION

SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS, LEGISLATION

Lead Sulphate Tribasic(12202-17-4) 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)
 Model Work Health and Safety Regulations 2011, Chapter 7 Hazardous Chemicals, Part 7.2 Lead.
 Labelling of Workplace Hazardous Chemicals- Code Of Practice
 Preparation of Safety Data Sheets for Hazardous Chemicals- Code of Practice

16. OTHER RELEVANT INFORMATION

Revision Information	Revision No	Date	Description
	1	29/10/15	Initial SDS creation

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 (MSDS)*,
- TGA** Therapeutic Goods Administration