

Infosafe No™ 1CHL0      Issue Date : June 2021      RE-ISSUED by CHEMSUPP

Product Name **LEAD SULFATE**

Classified as hazardous

## 1. Identification

**GHS Product Identifier** LEAD SULFATE

**Company Name** CHEMSUPPLY AUSTRALIA PTY LTD (ABN 19 008 264 211)

**Address** 38 - 50 Bedford Street GILLMAN  
SA 5013 Australia

**Telephone/Fax Number** Tel: (08) 8440-2000

**Emergency phone number** CHEMCALL 1800 127 406 (Australia) / +64-4-917-9888 (International)

**E-mail Address** www.chemsupply.com.au

**Recommended use of the chemical and restrictions on use** Paint pigments, storage batteries, rapid-drying oil varnishes, clay stabiliser, lithography and weighting fabrics.

<b>Other Names</b>	<u>Name</u>	<u>Product Code</u>
	LEAD SULFATE LR	LL047

### Other Information

ChemSupply Australia Pty Ltd does not warrant that this product is suitable for any use or purpose. The user must ascertain the suitability of the product before use or application intended purpose. Preliminary testing of the product before use or application is recommended. Any reliance or purported reliance upon ChemSupply Australia Pty Ltd with respect to any skill or judgement or advice in relation to the suitability of this product of any purpose is disclaimed. Except to the extent prohibited at law, any condition implied by any statute as to the merchantable quality of this product or fitness for any purpose is hereby excluded. This product is not sold by description. Where the provisions of Part V, Division 2 of the Trade Practices Act apply, the liability of ChemSupply Australia Pty Ltd is limited to the replacement of supply of equivalent goods or payment of the cost of replacing the goods or acquiring equivalent goods.

## 2. Hazard Identification

**GHS classification of the substance/mixture** Hazardous to the Aquatic Environment - Acute Hazard: Category 1  
Hazardous to the Aquatic Environment - Long-Term Hazard: Category 1  
Acute Toxicity - Inhalation: Category 4  
Specific target organ toxicity - Repeated Exposure Category 2  
Toxic to Reproduction: Category 1A  
Carcinogenicity - Category 2  
Germ cell mutagenicity - Category 2

**Signal Word (s)** DANGER

### Hazard Statement (s)

H332 Harmful if inhaled.  
H341 Suspected of causing genetic defects.  
H351 Suspected of causing cancer.  
H360Df May damage fertility or the unborn child.  
H373 May cause damage to organs through prolonged or repeated exposure.  
H410 Very toxic to aquatic life with long lasting effects.

### Pictogram (s)



### Precautionary statement – Prevention

P201 Obtain special instructions before use.  
P202 Do not handle until all safety precautions have been read and understood.  
P260 Do not breathe dust/fume/gas/mist/vapours/spray.  
P271 Use only outdoors or in a well-ventilated area.  
P273 Avoid release to the environment.

Infosafe No™ 1CHL0	Issue Date : June 2021	RE-ISSUED by CHEMSUPP
--------------------	------------------------	-----------------------

Product Name **LEAD SULFATE**

Classified as hazardous

<b>Precautionary statement – Response</b>	P281 Use personal protective equipment as required. P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P312 Call a POISON CENTER or doctor/physician if you feel unwell. P308+P313 IF exposed or concerned: Get medical advice/attention. P391 Collect spillage.
<b>Precautionary statement – Storage</b>	P405 Store locked up.
<b>Precautionary statement – Disposal</b>	P501 Dispose of contents/container to an approved waste disposal plant.

### 3. Composition/information on ingredients

Ingredients	<u>Name</u>	<u>CAS</u>	<u>Proportion</u>
	Lead sulfate	7446-14-2	100 %

### 4. First-aid measures

<b>Inhalation</b>	Remove victim from exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. Ensure airways are clear and have qualified person give oxygen through a face mask if breathing is difficult. If breathing has stopped, apply artificial respiration. If rapid recovery does not occur, obtain medical attention.
<b>Ingestion</b>	Rinse mouth thoroughly with water immediately, repeat until all traces of product have been removed. DO NOT INDUCE VOMITING. Seek medical advice if effects persist.
<b>Skin</b>	If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Wash clothing before reuse. If irritation occurs seek medical advice.
<b>Eye contact</b>	Immediately irrigate with copious quantity of water for at least 15 minutes. Eyelids to be held open. If rapid recovery does not occur, obtain medical attention
<b>First Aid Facilities</b>	Maintain eyewash fountain and safety shower in work area.
<b>Advice to Doctor</b>	Treat symptomatically based on judgement of doctor and individual reactions of the patient. Treat as for exposure to inorganic lead compounds. Physical examination should include haemoglobin determination, tests for blood lead levels and evaluation of renal function.
<b>Other Information</b>	For advice, contact a Poisons Information Centre (Phone eg Australia 13 1126; New Zealand 0800 764 766) or a doctor.

### 5. Fire-fighting measures

<b>Hazards from Combustion Products</b>	May liberate toxic fumes in fire such as oxides of lead and sulphur.
<b>Specific Methods</b>	Small fire: Use dry chemical, CO2 or water spray. If safe to do so, move undamaged containers from fire area. Large fire: Use water spray, fog or foam - Do not use water jets. Cool containers with flooding quantities of water until well after fire is out. Avoid getting water inside containers.
<b>Specific hazards arising from the chemical</b>	Material does not burn. Fire or heat will produce irritating, poisonous and/or corrosive gases. Runoff may pollute waterways.
<b>Hazchem Code</b>	2X
<b>Precautions in connection with Fire</b>	Wear SCBA and chemical splash suit. Fully-encapsulating, gas-tight suits should be worn for maximum protection. Structural firefighter's uniform is NOT effective for these materials.

### 6. Accidental release measures

Infosafe No™ 1CHL0	Issue Date : June 2021	RE-ISSUED by CHEMSUPP
--------------------	------------------------	-----------------------

 Product Name **LEAD SULFATE**

Classified as hazardous

<b>Spills &amp; Disposal</b>	Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Stop leak if safe to do so - Prevent entry into waterways, drains or confined areas. Cover with plastic sheet to prevent spreading. Absorb with earth, sand or other non-combustible material and transfer to container. DO NOT GET WATER INSIDE CONTAINERS. SEEK EXPERT ADVICE ON HANDLING AND DISPOSAL.
<b>Personal Precautions</b>	Avoid substance contact. Avoid generation of dusts: do not inhale dusts. Ensure supply of fresh air in enclosed rooms.
<b>Personal Protection</b>	Wear protective clothing specified for normal operations (see Section 8)
<b>Clean-up Methods - Small Spillages</b>	Sweep up (avoid generating dust) and using clean non-sparking tools transfer to a clean, suitable, clearly labelled container for disposal in accordance with local regulations.
<b>Clean-up Methods - Large Spillages</b>	Seek expert advice on handling and disposal.
<b>Environmental Precautions</b>	Use appropriate containment to avoid environmental contamination.

## 7. Handling and storage

<b>Precautions for Safe Handling</b>	Keep locked up. Keep container dry. Do not breathe dust. Avoid skin and eye contact and breathing in dust. Avoid prolonged or repeated exposure. Never add water to this product. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Under no circumstances eat, drink or smoke while handling this material. Wash hands and face thoroughly after working with material. Contaminated clothing should be removed and washed before re-use. If you feel unwell, seek medical attention and show the label when possible.
<b>Conditions for safe storage, including any incompatibilities</b>	Keep containers securely sealed and protected against physical damage. Keep container tightly closed in a dry, well-ventilated place away from direct sunlight. Store at room temperature (15 - 25 °C). Corrosive materials should be stored in a separate safety storage cabinet or room. Store away from foodstuffs. Keep containers closed at all times - check regularly for leaks. Isolate from incompatible substances.
<b>Storage Regulations</b>	Refer Australian Standard AS/NZS 4452:1997 'The storage and handling of toxic substances'.

## 8. Exposure controls/personal protection

Occupational exposure limit values	<u>Name</u>	STEL		TWA		<u>Footnote</u>
		<u>mg/m3</u>	<u>ppm</u>	<u>mg/m3</u>	<u>ppm</u>	
	Lead sulfate			0.15		Lead, inorganic dusts & fumes (as Pb)
<b>Other Exposure Information</b>	<p>These Workplace Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These workplace exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.</p> <p>A time weighted average (TWA) has been established for Lead, inorganic dust and fumes (as Pb) (Safe Work Australia) of 0.15 mg/m<sup>3</sup>. The exposure value at the TWA is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week.</p>					
<b>Appropriate engineering controls</b>	Maintain the concentrations values below the TWA. This may be achieved by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods.					
<b>Respiratory Protection</b>	Where ventilation is not adequate, respiratory protection may be required. Avoid breathing dust, vapours or mists. Respiratory protection should comply with AS 1716 - Respiratory Protective Devices and be selected in accordance with AS 1715 - Selection, Use and Maintenance of Respiratory Protective Devices. Filter capacity and respirator type depends on exposure levels. In					

Infosafe No™ 1CHL0	Issue Date : June 2021	RE-ISSUED by CHEMSUPP
--------------------	------------------------	-----------------------

Product Name **LEAD SULFATE**

Classified as hazardous

	event of emergency or planned entry into unknown concentrations a positive pressure, full-facepiece SCBA should be used. If respiratory protection is required, institute a complete respiratory protection program including selection, fit testing, training, maintenance and inspection.
<b>Eye Protection</b>	The use of a face shield, chemical goggles or safety glasses with side shield protection as appropriate. Must comply with Australian Standards AS 1337 and be selected and used in accordance with AS 1336.
<b>Hand Protection</b>	Wear gloves of impervious material conforming to AS/NZS 2161: Occupational protective gloves - Selection, use and maintenance. Final choice of appropriate glove type will vary according to individual circumstances. This can include methods of handling, and engineering controls as determined by appropriate risk assessments. Avoid skin contact when removing gloves from hands, do not touch the gloves outer surface. Dispose of gloves as hazardous waste.
<b>Personal Protective Equipment</b>	Personal protective equipment should not solely be relied upon to control risk and should only be used when all other reasonably practicable control measures do not eliminate or sufficiently minimise risk. Guidance in selecting personal protective equipment can be obtained from Australian, Australian/New Zealand or other approved standards.
<b>Footwear</b>	Safety boots in industrial situations is advisory, foot protection should comply with AS 2210, Occupational protective footwear - Guide to selection, care and use.
<b>Body Protection</b>	Clean impervious clothing should be worn. Clothing for protection against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.
<b>Hygiene Measures</b>	Always wash hands before smoking, eating or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

## 9. Physical and chemical properties

<b>Form</b>	Solid
<b>Appearance</b>	White to very faintly beige fine crystalline powder.
<b>Odour</b>	Odourless.
<b>Melting Point</b>	1170 °C
<b>Solubility in Water</b>	Practically insoluble. Soluble in about 2225 parts water. Slightly soluble in hot water.
<b>Solubility in Organic Solvents</b>	Insoluble in alcohol.
<b>Specific Gravity</b>	6.12-6.39
<b>Volatile Component</b>	0%
<b>Flammability</b>	Not combustible.
<b>Explosion Properties</b>	Not considered to be an explosion hazard. Sealed containers may rupture when heated.
<b>Molecular Weight</b>	303.25
<b>Solubility in other solvents (kg/m3)</b>	More soluble in dilute hydrochloric acid or nitric acid, less in dilute sulphuric acid, soluble in sodium hydroxide, ammonium acetate or tartrate solution, soluble in concentrated hydriodic acid.

## 10. Stability and reactivity

<b>Chemical Stability</b>	Stable under ordinary conditions of use and storage.
<b>Conditions to Avoid</b>	Heat, flames, ignition sources and incompatibles.
<b>Incompatible Materials</b>	Potassium, strong bases and alkali metals.
<b>Hazardous Decomposition Products</b>	Very toxic fumes of lead and sulfur oxides.

Infosafe No™ 1CHL0	Issue Date : June 2021	RE-ISSUED by CHEMSUPP
--------------------	------------------------	-----------------------

Product Name **LEAD SULFATE**

Classified as hazardous

**Possibility of hazardous reactions** Reacts violently or explosively with potassium.

**Hazardous Polymerization** Will not occur.

## 11. Toxicological Information

**Ingestion** Due to the poor absorbability via the gastrointestinal tract, only very high doses may lead to concern. Symptoms of ingestion of a very large dose over a short time period may include headache, fatigue, nausea, abdominal cramps, and joint pain. Acute poisoning can cause or lead to vomiting and constipation or bloody diarrhoea, joint and muscle pain, weakness of the extensor muscles (frequently the hand and wrist), depression, 'lead line' on the gums, metallic taste in the mouth, definite loss of appetite, insomnia, dizziness, possible convulsions, high lead levels in blood and urine with shock, coma and death in extreme cases. May affect behaviour/brain, metabolism, liver, cardiovascular system, urinary system, and blood. Exposure may cause anaemia and other blood abnormalities. High body levels produce increased cerebrospinal pressure, brain damage, and stupor leading to coma and often death. If left untreated, neuromuscular dysfunction, possible paralysis, and encephalopathy can result.

**Inhalation** Harmful if inhaled. Inhalation produces damaging effects on the mucous membranes and upper respiratory tract. Lead may be absorbed through the respiratory system. May cause moderate to severe gastrointestinal tract irritation with abdominal pain and spasms, nausea, vomiting, headache and diarrhoea.

**Skin** Inorganic lead and lead compounds may cause mild local irritation and may be absorbed through the skin, but it is not clear whether this type of exposure would increase the lead body burden and toxicity from this route is thought to be unlikely. Open cuts, abraded or irritated skin should not be exposed to this material. Contact over short periods may cause local irritation, redness and pain.

**Eye** Contact can cause blurred vision, redness, pain, severe irritation. Absorption can occur through eye tissues but the more common hazards are local irritation or abrasion. Concentrated solutions or high levels of dust or fumes may cause eye irritation or abrasion, with redness, tearing, stinging, blurred vision, temporary impairment of vision and/or other transient eye damage/ulceration. Absorption may occur through eye tissues.

**Respiratory sensitisation** Not classified based on available information.

**Skin Sensitisation** Not classified based on available information.

**Germ cell mutagenicity** Germ cell mutagenicity - Category 2  
H341 Suspected of causing genetic defects

**Carcinogenicity** Lead compounds, inorganic is evaluated in the IARC Monographs (Vol. 87; in preparation) as Group 2A: Probably carcinogenic to humans.  
Carcinogenicity - Category 2  
H351 Suspected of causing cancer

**Reproductive Toxicity** Toxic to Reproduction: Category 1A  
H360f May damage fertility or the unborn child. Suspected of damaging fertility.

**STOT-single exposure** Not classified based on available information.

**STOT-repeated exposure** Specific target organ toxicity (repeated exposure) - Category 2  
H373 May cause damage to organs through prolonged or repeated exposure

**Health Hazard** May be harmful if inhaled. Inhalation of dusts may cause irritation of the nose, throat and respiratory system (local irritation of the bronchia, and lungs). Symptoms such as metallic taste, chest and abdominal pain, and increased lead blood levels may follow. Effects such as headache, fatigue, joint pain, nausea, vomiting, abdominal cramps and constipation or bloody diarrhea may occur upon inhalation of large amounts. Lead can be absorbed through the respiratory system. See symptoms of ingestion. Lead accumulates in

Infosafe No™ 1CHL0 Issue Date : June 2021 RE-ISSUED by CHEMSUPP

Product Name **LEAD SULFATE**

Classified as hazardous

<b>Chronic Effects</b>	<p>the body and inorganic lead compounds are well known to cause significant health effects following chronic exposure. If a significant amount of lead has accumulated in the body, symptoms of long-term toxicity may develop after what may seem to be a short-term acute exposure. See Chronic Effects.</p> <p>Danger of cumulative effects. Adult: effects from chronic exposure include gastrointestinal signs such as nausea, vomiting, abdominal pain, metallic taste, anorexia and general feeling of malaise or fatigue. With longer exposures the patient may also have joint pain, progressive fatigue and anaemia. There is a strong association between elevated blood lead concentrations and anaemia which is characterised as hypochromic monocytic with a decrease in mean corpuscular haemoglobin and stippling of erythrocytes and reticulocytes. There may also be altered renal and hepatic function. Motor weakness may progress to paralysis of the extensor muscles of the wrist (wrist drop) and less often the ankles (foot drop). Adults may have a bluish gingival 'lead-line'. Encephalopathy rarely occurs in adults except from exposure to organic lead. If left untreated, neuromuscular dysfunction, possible paralysis, and encephalopathy can result. Child: clinical effects from chronic exposures include severe gastrointestinal disturbances with constipation, abdominal pain and tenderness. Other effects include anaemia, weakness, pallor, anorexia, insomnia, renal hypertension and mental fatigue. There may be a bluish 'lead line' on the gums although this is not often present. Lead may also be drawn to areas of the skeleton that grow most rapidly and in some cases hypermineralisation of the radius, tibia and femur can be seen on X-ray with the development of metaphyseal lines. Neuromuscular dysfunction may result in signs of motor weakness and paralysis of the extensor muscles of the wrist and ankles. Encephalopathy can occur in patients with previously mild symptoms. Effects include vomiting, confusion, ataxia, apathy, bizarre behaviour and coma and convulsions due to cerebral oedema.</p>
<b>Mutagenicity</b>	Not classified based on available information.
<b>Human Effects</b>	Children appear to be more susceptible than adults to the toxic effects of lead because of incomplete development of the blood brain barrier, greater intestinal absorption of lead and a tendency to put objects or their hands into their mouths thereby increasing ingestion of contaminated substances. In addition, they have a smaller proportion of dense bone tissue than adults and this prevents the transfer of the absorbed lead into bone, it remains in the soft tissues where it produces toxic effects. Lead poisoning by ingestion is more common in young children with a history of pica.

## 12. Ecological information

<b>Ecotoxicity</b>	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
<b>Persistence and degradability</b>	Products of Biodegradation: Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise. Toxicity of the Products of Biodegradation: The products of degradation are more toxic.
<b>Environmental Fate</b>	Lead released into the atmosphere partitions to surface water, soil and sediment. Lead is transported in the atmosphere and in surface water. If released into water, lead sulfate will mostly precipitate out due to its low solubility. Lead is strongly adsorbed onto sediment and soil particles. If released or deposited onto soil lead will be retained in the upper 2 - 5 cm of soil especially in soils with at least 5% organic matter or pH 5 or above. When released into the soil, this material is not expected to leach into groundwater, although there is some evidence to suggest that lead is taken up by some plants. Generally the uptake of lead by plants is not significant. Lead is expected to slowly undergo speciation to the more insoluble sulphate, sulphide, oxide and phosphate salts.
<b>Bioaccumulative Potential</b>	This material may bioaccumulate to some extent.

## 13. Disposal considerations

<b>Disposal Considerations</b>	Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and disposed of according to relevant local, state and federal government regulations.
--------------------------------	--

Infosafe No™ 1CHL0	Issue Date : June 2021	RE-ISSUED by CHEMSUPP
--------------------	------------------------	-----------------------

Product Name **LEAD SULFATE**

Classified as hazardous

## 14. Transport information

<b>Transport Information</b>	Dangerous Goods of Class 6 (Toxic and Infectious Substances) are incompatible in a placard load with any of the following: -Class 1, Class 3, if the Class 3 dangerous goods are nitromethane, Class 8, if the Class 6 dangerous goods are cyanides and the Class 8 dangerous goods are acids; and are incompatible with food and food packaging in any quantity.
<b>U.N. Number</b>	3288
<b>UN proper shipping name</b>	TOXIC SOLID, INORGANIC, N.O.S. - (Lead sulfate, solid)
<b>Transport hazard class(es)</b>	6.1
<b>Hazchem Code</b>	2X
<b>Packing Group</b>	III
<b>IERG Number</b>	34
<b>Environmental Hazards</b>	Very toxic to aquatic organisms. May cause long term adverse effects in the aquatic environment.

## 15. Regulatory information

<b>Regulatory Information</b>	All the constituents of this product are listed on the Australian Inventory of Chemical Substances ( AICS ), or exempted. Not listed under WHS Regulation 2011, Schedule 10 - Prohibited carcinogens, restricted carcinogens and restricted hazardous chemicals.
<b>Poisons Schedule</b>	S6

## 16. Other Information

<b>Literature References</b>	'Standard for the Uniform Scheduling of Medicines and Poisons .', Commonwealth of Australia. National Road Transport Commission, 'Australian Code for the Transport of Dangerous Goods by Road and Rail 7th. Ed.'. Safe Work Australia, 'National Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals'. Standards Australia, 'SAA/SNZ HB 76:2010 Dangerous Goods - Initial Emergency Response Guide', Standards Australia/Standards New Zealand. Safe Work Australia, 'Hazardous Chemical Information System'. Safe Work Australia, 'National Code of Practice for the Labelling of Safe Work Hazardous Substances'. Safe Work Australia, 'National Exposure Standards for Atmospheric Contaminants in the Occupational Environment'.
<b>Contact Person/Point</b>	Paul McCarthy Ph. (08) 8440 2000 <b>DISCLAIMER STATEMENT:</b> All information provided in this data sheet or by our technical representatives is compiled from the best knowledge available to us. However, since data, safety standards and government regulations are subject to change and the conditions of handling and use, or misuse, are beyond our control, we make no warranty either expressed or implied, with respect to the completeness or accuracy to the information contained herein. ChemSupply Australia Pty Ltd accepts no responsibility whatsoever for its accuracy or for any results that may be obtained by customers from using the data and disclaims all liability for reliance on information provided in this data sheet or by our technical representatives.
<b>Empirical Formula &amp; Structural Formula</b>	PbSO4  ...End Of MSDS...

© Copyright Chemical Safety International Pty Ltd

Copyright in the source code of the HTML, PDF, XML, XFO and any other electronic files rendered by an Infosafe system for Infosafe MSDS displayed is the intellectual property of Chemical Safety International Pty Ltd.

Copyright in the layout, presentation and appearance of each Infosafe MSDS displayed is the intellectual property of Chemical Safety International Pty Ltd. The compilation of MSDS's displayed is the intellectual property of Chemical Safety International Pty Ltd.

Copying of any MSDS displayed is permitted for personal use only and otherwise is not permitted. In particular the MSDS's displayed cannot be copied for the purpose of sale or licence or for inclusion as part of a collection of MSDS without the express written consent of Chemical Safety International Pty Ltd.