Infosafe No™ 1CHBK Issue Date :November 2021 RE-ISSUED by CHEMSUPP

Product Name **SODIUM BISULFATE Anhydrous**

Classified as hazardous

1. Identification

GHS Product Identifier	SODIUM BISULFATE Anhydrous
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	Flux for decomposing minerals; substitute for sulfuric acid in dyeing; disinfectant; liberating CO2 in carbonic acid baths, in thermophores; carbonizing wool; to reduce alkalinity and pH in swimming pools; manufacture of magnesia cements, paper, soap, perfumes, industrial and household cleaners, foods, silver and metal pickling compounds, sodium hydrosulfide, sodium sulfate and soda alum and laboratory reagent.

Other Names

Name	Product Code
SODIUM BISULFATE LR Sodium hydrogen sulfate, Sodium pyrosulfate, Sodium acid sulfate	SL010

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	Eye Damage/Irritation: Category 1
Signal Word (s)	DANGER
Hazard Statement (s)	H318 Causes serious eye damage.
Pictogram (s)	Corrosion

Precautionary statement – Prevention	P280 Wear protective gloves/protective clothing/eye protection/face protection.
Precautionary statement – Response	P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a POISON CENTER or doctor/physician.

3. Composition/information on ingredients

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Ingredients	Name	CAS	Proportion
	Sodium bisulfate	7681-38-1	95-100 %

4. First-aid measures

Inhalation If inhaled, remove from contaminated area to fresh air immediately. Apply artificial respiration if not breathing. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.

Ingestion 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.

Skin If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. If rapid recovery does not occur, obtain medical attention

Eye contact Immediately irrigate with copious quantity of water for at least 15 minutes. Eyelids to be held open. Obtain medical attention immediately.

First Aid Facilities Maintain eyewash fountain and safety shower in work area.

Advice to Doctor Treat symptomatically based on judgement of doctor and individual reactions of the patient.

Protection for First Aiders No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing or wear gloves.

Other Information For advice, contact a Poisons Information Centre (Phone eg Australia 13 1126; New Zealand 0800 764 766) or a doctor.

5. Fire-fighting measures

Hazards from Combustion Products Sulfur oxides (SO2, SO3, etc.), sulfuric acid, sodium oxides and suffocating and toxic fumes. Reacts with most metals in the presence of moisture, liberating extremely flammable hydrogen gas.

Specific Methods Use extinguishing media most appropriate for the surrounding fire. No limitations to the type of extinguishing media.
Small fire: Use dry chemical, CO2 or water spray. If safe to do so, move undamaged containers from fire area.
Large fire: Use dry chemical, CO2, foam or water spray - Do not use water jets.
Cool containers with flooding quantities of water until well after fire is out. Avoid getting water inside containers.

Precautions in connection with Fire 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

Personal Precautions Avoid substance contact. Avoid generation of dusts: do not inhale dusts. Ensure supply of fresh air in enclosed rooms.

Personal Protection Wear protective clothing specified for normal operations (see Section 8)

Clean-up Methods - Small Spillages 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.

7. Handling and storage

Precautions for Safe Handling Avoid ingestion or inhalation of dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure. Avoid generating dust. Keep container tightly closed. Use only with adequate ventilation. Operations should be carried out in an efficient fume hood or equivalent system. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Wear appropriate protective equipment to prevent inhalation, skin and eye contact. Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Discard contaminated shoes. Have emergency equipment (for fires,

	spills, leaks, etc.) readily available. Ensure a high level of personal hygiene is maintained when using this product. That is; always wash hands before eating, drinking, smoking or using the toilet. Keep locked up. Never add water to this product. Keep away from incompatibles such as oxidizing agents, alkalis. Chemicals should be used only by those trained in handling potentially hazardous materials.
Conditions for safe storage, including any incompatibilities	Store in tightly sealed containers, in a cool, dry, well-ventilated area, out of direct sunlight and moisture. Store in labelled containers. Keep container tightly closed when not in use. Product reacts with water. Moisture sensitive. Prevent contact with atmospheric moisture. Store away from water and incompatible materials.
Corrosiveness	Corrosive to aluminium in aqueous solution. Corrosive to most metals (carbon steel, copper, copper alloys, zinc or nickel) in the presence of moisture, liberating extremely flammable hydrogen gas.
Storage Regulations	Refer Australian Standard AS 3780-2008 'The storage and handling of corrosive substances'.
Unsuitable Materials	Aqueous solutions cannot be stored in aluminium, carbon steel, copper, copper alloys, zinc or nickel containers.

8. Exposure controls/personal protection

Other Exposure Information	No exposure standards have been established for this product by Safe Work Australia, however, the TWA exposure standard for dusts/mists not otherwise specified is 10 mg/m3. All atmospheric contamination should be kept to as low a level as is workable. 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.
Appropriate engineering controls	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.
Respiratory Protection	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 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.
Eye Protection	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.
Hand Protection	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.
Personal Protective Equipment	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.
Footwear	Safety boots in industrial situations is advisory, foot protection should comply with AS 2210, Occupational protective footwear - Guide to selection, care and use.
Body Protection	Clean impervious clothing should be worn. Clothing for protection against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.

Hygiene Measures	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

Form	Solid
Appearance	White crystalline solid.
Odour	Faint acidic odour.
Melting Point	ca. 180 °C; ca. 186 °C; > 315 °C (poorly defined because substance begins to decompose into sodium pyrosulfate and water before it reaches its melting point).
Solubility in Water	Very soluble (1080 g/l at 20 °C).
Specific Gravity	ca. 2.74 at 20 °C
pH	1 - 1.2 (200 g/L °C, 25 °C)
Flammability	Non combustible material.
Explosion Properties	Contact with metals will produce flammable and explosive hydrogen gas.
Molecular Weight	120.06

10. Stability and reactivity

Chemical Stability	Stable under ordinary conditions of use and storage. Hygroscopic
Conditions to Avoid	Dust generation, excess heat, strong heating, extremes of temperature, direct sunlight, exposure to moist air or water.
Incompatible Materials	Metals (formation of: acids, sulfates), strong bases, strong oxidising agents, moisture, water or alcohol, liquid chlorine bleach (hypochlorites), ammonia cleansers or similar products.
Hazardous Decomposition Products	Sulfur oxides (SO2, SO3, etc.), sulfuric acid, sodium oxides and suffocating and toxic fumes. Reacts with most metals in the presence of moisture, liberating extremely flammable hydrogen gas.
Possibility of hazardous reactions	Reactive with lyes (under warming), alkalis, ammonia cleansers or similar products. Reactive with metals in the presence of water (formation of hydrogen, acids, sulfates). Reactive with moisture. Liberates acid in contact with water. Reactive with alcohol to give sodium sulfate and free H2SO4. Reactive with oxidizing agents, liquid chlorine bleach (hypochlorites).
Hazardous Polymerization	Will not occur.

11. Toxicological Information

Acute Toxicity - Oral	LD50 (rat): 2490 mg/kg.
Ingestion	Ingestion of this product may cause nausea, vomiting, abdominal pain and chemical burns to the mouth, throat, stomach and the digestive tract.
Inhalation	Inhalation of dust may cause severe irritation of the mucous membranes and respiratory tract with sore throat, burning sensation, sneezing, coughing, wheezing, shortness of breath, laryngitis, headache, nausea, vomiting and delayed lung oedema and possible harmful corrosive effects including lesions of the nasal septum, pulmonary oedema, pneumonitis and emphysema. Severe over-exposure can produce lung damage, choking, unconsciousness or death.
Skin	Contact with skin causes irritation and possible burns, especially if the skin is wet or moist. Skin contact can produce inflammation and blistering. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering, severe pain and chemical burns with resultant tissue destruction. The amount of tissue damage depends on length of contact. May be harmful if absorbed through the skin.
Eye	Corrosive - causes eye burns. Eye contact will cause severe eye irritation, stinging, blurring, tearing, inflammation (redness, watering, itching), severe

	pain and possible permanent corneal damage or blindness. The amount of tissue damage depends on length of contact.
Respiratory sensitisation	Not classified based on available information.
Skin Sensitisation	Not classified based on available information.
Germ cell mutagenicity	Not classified based on available information.
Carcinogenicity	Not listed in the IARC Monographs. Not classified based on available information.
Reproductive Toxicity	Not classified based on available information.
STOT-single exposure	Not classified based on available information.
STOT-repeated exposure	Not classified based on available information.
Chronic Effects	Repeated skin exposure can produce local skin destruction or dermatitis. Repeated or prolonged exposure to the substance can produce lung damage. Repeated exposure of the eyes to a low level of dust can produce eye irritation. Repeated or prolonged exposure to the substance can produce mucous membrane, skin, eye, lens or corneal damage.
Serious eye damage/irritation	Eye Damage/Irritation: Category 1 H318 Causes serious eye damage.
Skin corrosion/irritation	Not classified based on available information.

12. Ecological information

Ecotoxicity	Quantitative data on the ecological effect of this product are not available. Harmful effect due to pH shift.
Persistence and degradability	Products of Biodegradation: These products are sulfur oxides (SO2, SO3 etc.) and some sodium oxides. Toxicity of the Products of Biodegradation: The product itself and its products of degradation are not toxic.
Information on Ecological Effects	Ecotoxic effects: Harmful effect due to pH shift.
Other Precautions	Runoff from fire control or dilution is strongly acidic and hence may react with metals to produce hydrogen, a flammable gas.
Environmental Protection	Do not allow to enter waters, waste water, or soil!
Acute Toxicity - Daphnia	Daphnia magna EC50: 190 mg/l /48 hr.
Acute Toxicity - Bacteria	Pseudomonas putida EC10: >1000 mg/l/16hr

13. Disposal considerations

Disposal Considerations	Whatever cannot be saved for recovery or recycling should be disposed of according to relevant local, state and federal government regulations.

14. Transport information

Transport Information	Not classified as a Dangerous Good according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.

15. Regulatory information

Regulatory Information	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.
Poisons Schedule	S5

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16. Other Information

Literature References

'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'.

Contact Person/Point

Paul McCarthy Ph. (08) 8440 2000 DISCLAIMER STATEMENT:
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Empirical Formula & Structural Formula

$NaHSO_4$

...End Of MSDS...