# **SAFETY DATA SHEET**



Revision date: 13-Jun-2024

**Revision Number** 8

# Section 1: Identification

**Product identifier** 

Product Name SODIUM BISULFITE SOLUTION

**Product Code(s)** 000034437601

Other means of identification

UN number or ID number 2693

**Synonyms** Sodium hydrogen sulfite solution; Sodium bisulphite solution 15-40%.

Recommended use of the chemical and restrictions on use

**Recommended use** Dechlorination of waste-water; reducing agent for chromium plating solution.

**Uses advised against** No information available.

Details of manufacturer or importer

**Supplier** 

IXOM Operations Pty Ltd ABN: 51 600 546 512 Level 8, 1 Nicholson Street Melbourne 3000

Australia

Telephone Number: +61 3 9906 3000

### Emergency telephone number

Emergency telephone number 1 800 033 111 (ALL HOURS)

Please ensure you refer to the limitations of this Safety Data Sheet as set out in the "Other Information" section at the end of this Data Sheet.

### Section 2: Hazard identification

Classified as a hazardous substance in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS). Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail: DANGEROUS GOODS.

#### **GHS Classification**

Corrosive to metals	Category 1
Serious eye damage/eye irritation	Category 1

### Label elements

Corrosion



### Signal word DANGER

#### **Hazard statements**

H290 - May be corrosive to metals H318 - Causes serious eye damage

### **Precautionary Statements - Prevention**

Keep only in original packaging. Wash eyes thoroughly after handling. Wear eye/face protection.

# **Precautionary Statements - Response**

Specific treatment (see First aid on this SDS).

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

Absorb spillage to prevent material damage.

# **Precautionary Statements - Storage**

Store in corrosion resistant container with a resistant inner liner.

### **Precautionary Statements - Disposal**

Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable.

#### Other hazards which do not result in classification

May be harmful if swallowed.

Contact with acids liberates toxic gas.

# Section 3: Composition and information on ingredients

Chemical name	CAS No.	Weight-%
Sodium bisulfite	7631-90-5	15-40%
Water	7732-18-5	to 100%

# Section 4: First aid measures

### **Description of first aid measures**

General advice For advice, contact a Poisons Information Centre (e.g. phone Australia 13 11 26; New

Zealand 0800 764 766) or a doctor.

**Inhalation** Remove to fresh air. (Call a physician if symptoms occur).

**Eye contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open

while rinsing. Do not rub affected area. Get immediate medical attention.

**Skin contact** Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical

attention if irritation develops and persists.

**Ingestion** Never give anything by mouth to an unconscious person. Get medical attention if symptoms

occur. Clean mouth with water and drink afterwards plenty of water.

**Self-protection of the first aider** Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

Most important symptoms and effects, both acute and delayed

Symptoms May cause redness and tearing of the eyes. Irritation/Corrosion.

**Effects of Exposure** No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

# Section 5: Firefighting measures

Suitable Extinguishing Media

**Suitable extinguishing media**Dry chemical, CO2, water spray or regular foam.

**Unsuitable extinguishing media** No information available.

Specific hazards arising from the chemical

Specific hazards arising from the

chemical

Non-combustible. Thermal decomposition can lead to release of irritating gases and vapors.

Special protective actions for fire-fighters

Special protective equipment and

precautions for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Use personal protection equipment.

Hazchem code 2X

### Section 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes or clothing. Do not touch or walk through spilled material.

Evacuate personnel to safe areas. Use personal protective equipment as required. Wash

thoroughly after handling.

**Other information** Refer to protective measures listed in Sections 7 and 8.

Environmental precautions

**Environmental precautions** Prevent further leakage or spillage if safe to do so.

Methods and material for containment and cleaning up

**Methods for containment** Prevent further leakage or spillage if safe to do so.

Methods for cleaning up

Take up with sand or other noncombustible absorbent material and place into containers for

later disposal.

# Section 7: Handling and storage

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with

skin, eyes or clothing. Do not eat, drink or smoke when using this product. Use personal

protection equipment. Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep container

closed when not in use.

Packaging materials Suitable packaging materials include polyethylene, polypropylene, and/or poly-lined

containers.

Incompatible materials Acids. Mild steel. Water reactive chemical.

# Section 8: Exposure controls and personal protection

### Control parameters

**Exposure Limits** No value assigned for this specific material by Safe Work Australia. However, Workplace

Exposure Standard(s) for constituent(s):

Chemical name	Australia	New Zealand	ACGIH TLV
Sodium bisulfite	TWA: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>
7631-90-5	-	-	-

Chemical name	European Union	United Kingdom	Germany DFG
Sodium bisulfite	-	TWA: 5 mg/m <sup>3</sup>	-
7631-90-5		STEL: 15 mg/m <sup>3</sup>	

As published by Safe Work Australia Workplace Exposure Standards for Airborne Contaminants.

TWA - The time-weighted average airborne concentration of a particular substance when calculated over an eight-hour working day, for a five-day working week.

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

# Engineering controls Eyewash stations. Apply technical measures to comply with the occupational exposure

limits.

If in the handling and application of this material, safe exposure levels could be exceeded, the use of engineering controls such as local exhaust ventilation must be considered and the results documented. If achieving safe exposure levels does not require engineering controls, then a detailed and documented risk assessment using the relevant Personal Protective Equipment (PPE) (refer to PPE section below) as a basis must be carried out to determine the minimum PPE requirements.

## Individual protection measures, such as personal protective equipment

The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

OVERALLS, SAFETY SHOES, CHEMICAL GOGGLES, GLOVES.



**Eye/face protection** Tight sealing safety goggles.

**Skin and body protection**Boots. Overalls. Impervious clothing.

Hand protection Impervious gloves.

**Respiratory protection** If determined by a risk assessment an inhalation risk exists, wear a suitable mist respirator

meeting the requirements of AS/NZS 1715 and AS/NZS 1716.

**Environmental exposure controls** No information available.

Thermal hazards No information available.

# Section 9: Physical and chemical properties

### Information on basic physical and chemical properties

Physical state Liquid

Appearance No information available

Color Pale Yellow

Odor Pungent , Sulfur -like
Odor threshold No information available

PropertyValuesRemarks • MethodpHca. 4-5None known

pH (as aqueous solution) No data available None known Melting point / freezing point No data available None known Boiling point / boiling range No data available None known Flash point Not applicable None known No data available **Evaporation rate** None known Flammability (solid, gas) No data available None known Flammability Limit in Air None known

Upper flammability or explosive Not applicable

limits

Lower flammability or explosive Not applicable

limits

Vapor pressure No data available None known No data available Vapor density None known Relative density ca. 1.1-1.4 None known Water solubility Miscible in water None known Solubility(ies) No data available None known No data available **Partition coefficient** None known No data available **Autoignition temperature** None known No data available **Decomposition temperature** None known No data available Kinematic viscosity None known No data available Dynamic viscosity None known

Other information

# Section 10: Stability and reactivity

Reactivity

**Reactivity** Contact with acids liberates toxic gas.

Chemical stability

Stability Stable under normal ambient and anticipated storage and handling conditions of

temperature and pressure.

**Explosion data** 

Sensitivity to mechanical impact None. Sensitivity to static discharge None.

Possibility of hazardous reactions

Possibility of hazardous reactions Corrosive to mild steel.

**Hazardous polymerization** Hazardous polymerization does not occur.

Conditions to avoid

Conditions to avoid Heat.

Incompatible materials

Incompatible materials Acids. Mild steel. Water reactive chemical.

Hazardous decomposition products

Hazardous decomposition products Oxides of sulfur.

# Section 11: Toxicological information

### Information on likely routes of exposure

Product Information No adverse health effects expected if the chemical is handled in accordance with this Safety

Data Sheet and the chemical label. Symptoms or effects that may arise if the chemical is

mishandled and overexposure occurs are:

**Inhalation** May cause irritation.

**Eye contact** Causes serious eye damage.

**Skin contact** May cause irritation.

Ingestion Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Symptoms May cause redness and tearing of the eyes. Irritation/Corrosion.

Acute toxicity \_.

Numerical measures of toxicity - Product Information

No information available

**Component Information** 

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Sodium bisulfite	= 1310 mg/kg (Rat)	-	-

Water	> 90 mL/kg (Rat)	-	-

See section 16 for terms and abbreviations

Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Skin corrosion/irritation**No information available.

Serious eye damage/eye irritation Causes serious eye damage. Classification is based on mixture calculation methods based

on component data.

**Respiratory or skin sensitization** No information available.

**Germ cell mutagenicity** No information available.

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	Australia	European Union	IARC
Sodium bisulfite - 7631-90-5	-	-	Group 3

### IARC (International Agency for Research on Cancer)

Group 3 - Not Classifiable as to Carcinogenicity in Humans

**Reproductive toxicity** No information available.

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available.

**Aspiration hazard** No information available.

Other adverse effects Estimated fatal dose in humans is 10 g. The sodium bisulfite constituent in this product can

sensitise the skin and/or respiratory tract of some susceptible individuals.

# Section 12: Ecological information

### **Ecotoxicity**

Aquatic ecotoxicity Keep out of waterways.

Chemical name	Algae/aquatic plants	Fish	Toxicity to	Crustacea
			microorganisms	
Sodium bisulfite	-	-	-	EC50: =119mg/L (48h,
				Daphnia magna)

**Terrestrial ecotoxicity** There is no data for this product.

Persistence and degradability

Persistence and degradability No information available.

Bioaccumulative potential

There is no data for this product. Bioaccumulation

**Component Information** 

**Mobility** 

Mobility No information available.

Other adverse effects

Other adverse effects No information available.

# Section 13: Disposal considerations

Waste treatment methods

Waste from residues/unused

products

Refer to Waste Management Authority. Dispose of material through a licensed waste

contractor.

Empty containers should be taken to an approved waste handling site for recycling or Contaminated packaging

disposal.

See section 8 for more information

# Section 14: Transport information

Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code ADG

(ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.

**UN number or ID number** 

Proper shipping name

BISULPHITES, AQUEOUS SOLUTION, N.O.S. (CONTAINS SODIUM BISULPHITE)

Transport hazard class(es) Packing group Ш Hazchem code 2X

Classified as Dangerous Goods by the criteria of the International Air Transport Association IATA

(IATA) Dangerous Goods Regulations for transport by air; DANGEROUS GOODS.

**UN** number

BISULFITES, AQUEOUS SOLUTION, N.O.S. (CONTAINS SODIUM BISULFITE) **UN** proper shipping name

Transport hazard class(es) Packing group Ш

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous IMDG

Goods Code (IMDG Code) for transport by sea; DANGEROUS GOODS.

**UN** number

**UN** proper shipping name BISULFITES, AQUEOUS SOLUTION, N.O.S. (CONTAINS SODIUM BISULFITE)

Transport hazard class(es) 8 Packing group Ш **IMDG EMS Fire** F-A **IMDG EMS Spill** S-B

Not applicable Marine pollutant

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No information available

# Section 15: Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

### National regulations

#### Australia

Classified as a hazardous substance in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS). Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail: DANGEROUS GOODS.

See section 8 for national exposure control parameters

### Standard for Uniform Scheduling of Medicines and Poisons (SUSMP)

No poisons schedule number allocated

Poison Schedule Number Not applicable

### **Australian Industrial Chemicals Introduction Scheme (AICIS)**

Contact supplier for inventory compliance status

	Australian Industrial Chemicals Introduction Scheme (AICIS)	Additional information
Sodium bisulfite - 7631-90-5	Present	-
Water - 7732-18-5	Present	-

# **Illicit Drug Precursors/Reagents**

This product does not contain any substance(s) on the Illicit Drug Precursors/Reagents list.

# **International Inventories**

All the constituents of this material are listed on the Australian Inventory of Industrial

Chemicals.

NZIOC All the constituents of this material are listed on the New Zealand Inventory of Chemicals.

TSCA Contact supplier for inventory compliance status.

DSL/NDSL Contact supplier for inventory compliance status.

EINECS/ELINCS Contact supplier for inventory compliance status.

ENCS Contact supplier for inventory compliance status.

IECSC Contact supplier for inventory compliance status.

KECL Contact supplier for inventory compliance status.

#### Legend:

AllC- Australian Inventory of Industrial Chemicals

NZIoC - New Zealand Inventory of Chemicals

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

#### **International Regulations**

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

# Section 16: Other information

Reason(s) For Issue: 5 Yearly Revised Primary SDS

**Prepared By** This Safety Data Sheet has been prepared by IXOM Operations Pty Ltd (Toxicology and

SDS Services).

**Revision date:** 13-Jun-2024

**Revision Note:** 

The symbol (\*) in the margin of this SDS indicates that this line has been revised.

#### Key or legend to abbreviations and acronyms used in the safety data sheet

SVHC: Substances of Very High Concern for Authorization: PBT: Persistent, Bioaccumulative, and Toxic (PBT) Substances vPvB: Very Persistent and very Bioaccumulative (vPvB) Substances

STOT: Specific Target Organ Toxicity

ATE: Acute Toxicity Estimate LC50: 50% Lethal Concentration

LD50: 50% Lethal Dose

### Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

**TWA** TWA (time-weighted average) STEL (Short Term Exposure Limit) STEL

Maximum limit value Ceiling Skin designation

Carcinogen

# Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR) U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA)

**Environmental Protection Agency** 

Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

National Institute of Technology and Evaluation (NITE)

Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

Australian Industrial Chemicals Introduction Scheme (AICIS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

U.S. National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
Organization for Economic Co-operation and Development High Production Volume Chemicals Program
Organization for Economic Co-operation and Development Screening Information Data Set
World Health Organization

### **Disclaimer**

This SDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since IXOM Operations Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.

If clarification or further information is needed, the user should contact their IXOM representative or IXOM Operations Pty Ltd at the contact details on page 1.

IXOM Operations Pty Ltd's responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request.

**End of Safety Data Sheet**