

Safety Data Sheet Sodium metabisulphite Revision 3, Date 29 Jun 2017

1. IDENTIFICATION

Product Name Sodium metabisulphite **Other Names** Disulfurous acid, disodium salt

For industrial use, food additive, reducing agent, whitening agent, for professional use. Uses

Chemical Family No Data Available **Chemical Formula** H2O5S2.2Na

Chemical Name Sodium metabisulphite **Product Description** No Data Available

Contact Details of the Supplier of this Safety Data Sheet

Organisation	Location	Telephone
Redox Pty Ltd	2 Swettenham Road Minto NSW 2566 Australia	+61-2-97333000
Redox Pty Ltd	11 Mayo Road Wiri Auckland 2104 New Zealand	+64-9-2506222
Redox Inc.	3960 Paramount Boulevard Suite 107 Lakewood CA 90712 USA	+1-424-675-3200
Redox Chemicals Sdn Bhd	Level 2, No. 8, Jalan Sapir 33/7 Seksyen 33, Shah Alam Premier Industrial Park 40400 Shah Alam Sengalor, Malaysia	+60-3-5614-2111

Emergency Contact Details

For emergencies only; DO NOT contact these companies for general product advice.

Organisation	Location	Telephone
Poisons Information Centre	Westmead NSW	1800-251525 131126
Chemcall	Australia	1800-127406 +64-4-9179888
Chemcall	Malaysia	+64-4-9179888
Chemcall	New Zealand	0800-243622 +64-4-9179888
National Poisons Centre	New Zealand	0800-764766
CHEMTREC	USA & Canada	1-800-424-9300 CN723420 +1-703-527-3887

2. HAZARD IDENTIFICATION

Poisons Schedule (Aust)

Globally Harmonised System

5

Sydney



Hazard Classification Hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of

Chemicals (GHS)

Hazard Categories Acute Toxicity (Oral) - Category 4

Serious Eye Damage/Irritation - Category 1

Pictograms





Signal Word Danger

Hazard Statements H302 Harmful if swallowed.

H318 Causes serious eye damage.

AUH031 Contact with acids liberates toxic gas

Precautionary Statements Prevention **P264** Wash exposed skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P280 Wear eye protection/face protection.

Response P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

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.

P330 Rinse mouth.

Disposal P501 Dispose of contents/container in accordance with local / regional / national /

international regulations.

National Transport Commission (Australia)

Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

 Dangerous Goods Classification
 NOT Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous

Goods by Road & Rail (ADG Code)

Environmental Protection Authority (New Zealand)

Hazardous Substances and New Organisms Amendment Act 2015

HSNO Classifications	Health Hazards	6.1D	Substances that are acutely toxic - Harmful
		6.3A	Substances that are irritating to the skin
		6.5A	Substances that are respiratory sensitisers
		6.5B	Substances that are contact sensitisers
		8.3A	Substances that are corrosive to ocular tissue
	Environmental Hazards	9.1D	Substances that are slightly harmful to the aquatic environment or are otherwise designed for biocidal action
		9.2B	Substances that are ecotoxic in the soil environment
		9.3C	Substances that are harmful to terrestrial vertebrates

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Sodium metabisulphite	Na2S2O5	7681-57-4	>=90 %

4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure

Swallowed If swallowed: Rinse mouth. Do NOT induce vomiting unless directed to do so by medical personnel. If vomiting

occurs, the head should be kept low so that vomit does not enter the lungs. Obtain immediate medical care. Never

give anything by mouth to an unconscious person.

Eye Eye contact: Rinse cautiously with water for several minutes, holding eyelids open and protecting the uninjured eye.

Remove contact lenses if present and easy to do. Continue rinsing. Immediately call a Poison Centre or

doctor/physician.

Skin Skin contact: Remove contaminated clothing and shoes immediately. Wash skin with plenty of soap and water. If skin

irritation occurs, get medical advice/attention. Wash contaminated clothing and shoes before reuse.

Inhaled If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing until recovered. Call a

Poison Centre or doctor/physician if experiencing respiratory symptoms, or if you feel unwell.

Medical Conditions Aggravated

by Exposure

Advice to Doctor

Treat symptomatically.

No information available.

5. FIRE FIGHTING MEASURES

General Measures If safe to do so, move undamaged containers from fire area.

Flammability Conditions May burn but does not ignite readily.

Extinguishing Media Suitable: Water or Carbon dioxide (CO2).

Fire and Explosion Hazard Do not inhale explosion and combustion gases.

Hazardous Products of

Combustion

Fire may produce irritating and toxic fumes.

Special Fire Fighting

Instructions

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Personal Protective Equipment Wear self contained breathing apparatus (SCBA) and suitable protective equipment.

Flash PointNo Data AvailableLower Explosion LimitNo Data AvailableUpper Explosion LimitNo Data AvailableAuto Ignition TemperatureNo Data AvailableHazchem CodeNo Data Available

6. ACCIDENTAL RELEASE MEASURES

General Response Procedure Increase ventilation. Do not touch or walk through spilled material. Prevent dust cloud.

Clean Up Procedures Sweep or vacuum. Avoid generating dust. Collect and seal in properly labelled containers or drums for disposal.

Containment Stop leak if safe to do so. Prevent entry into waterways, drains or confined areas.

Decontamination Wash area with plenty of water. Retain contaminated washing water and dispose appropriately.

Environmental Precautionary

Measures

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Evacuation Criteria Spill or leak area should be isolated immediately. Keep unauthorised/unprotected personnel away.

Personal Precautionary

Measures

Wear personal protective equipment (see Section 8).

7. HANDLING AND STORAGE

Handling Ensure an eye bath and safety shower are available and ready for use. Observe good personal hygiene practices and

recommended procedures. Ensure adequate ventilation. Wear personal protective equipment (see Section 8). Avoid contact with skin and eyes. Avoid breathing dust. Before making transfer operations, ensure that containers are free from any incompatible materials/residues. Do NOT reuse empty containers unless they have been thoroughly cleaned.

Storage Storage Store in a cool, dry and well-ventilated place. Keep away from food, drink and feed. Keep away from acids and

oxidising agents. Keep containers closed when not in use. Check regularly for spills.

Container Keep in original container.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General Safe Work Australia (SWA) Exposure Standard for Sodium metabisulphite (CAS No. 7681-57-4):

- Time Weighted Average (TWA): 5 mg/m3

DNEL Values:

Inhalation (worker): 225 mg/m3 (long-term, systemic effects)
Inhalation (consumer): 66 mg/m3 (long-term, local effects)
Ingestion (consumer): 8.6 mg/kg (long-term, local effects)

Exposure Limits No Data Available

Biological Limits PNEC Values for Sodium metabisulphite (CAS No. 7681-57-4):

- Freshwater: 1 mg/l - Marine water: 0.1 mg/l

- Sewage treatment (microorganisms): 75.4 mg/l

Engineering Measures A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local

exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Adequate ventilation should be provided so that exposure limits

are not exceeded.

Personal Protection Equipment Respiratory protection: Wear a particle filter device (DIN EN 143).

Eye protection: Eye glasses with side protection.

Hand protection: Use protective gloves that provide comprehensive protection. Suitable material: UNI EN 420/UNI EN

374.

Skin/body protection: Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or

Viton.

Special Hazards Precaustions No.

No information available.

Work Hygienic Practices Do not eat, drink or smoke while working. A

Do not eat, drink or smoke while working. Always wash hands before smoking, eating, drinking or using the toilet. Contaminated clothing should be changed before entering eating areas. Wash contaminated clothing before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State Solid

Appearance Crystals or powder

OdourPungentColourWhite

pH 3.5 - 5.0 (5%)
 Vapour Pressure No Data Available
 Relative Vapour Density No Data Available
 Boiling Point No Data Available

Solubility 470 g/L water 20°C

Specific Gravity 1.2 - 1.3

Flash Point No Data Available

Auto Ignition Temp No Data Available **Evaporation Rate** No Data Available **Bulk Density** No Data Available **Corrosion Rate** No Data Available **Decomposition Temperature** No Data Available **Density** No Data Available **Specific Heat** No Data Available Molecular Weight No Data Available **Net Propellant Weight** No Data Available

Octanol Water Coefficient -3.7

Particle Size No Data Available **Partition Coefficient** No Data Available Saturated Vapour Concentration No Data Available **Vapour Temperature** No Data Available **Viscosity** No Data Available **Volatile Percent** No Data Available **VOC Volume** No Data Available **Additional Characteristics** No Data Available

Potential for Dust Explosion No information available. **Fast or Intensely Burning** No information available.

Characteristics

Flame Propagation or Burning

Rate of Solid Materials

Non-Flammables That Could

Contribute Unusual Hazards to a Fire

Properties That May Initiate or

Contribute to Fire Intensity

Reactions That Release Gases

or Vapours

Release of Invisible Flammable

Vapours and Gases

No information available.

No information available.

May burn but does not ignite readily.

Fire may produce irritating and toxic fumes. Contact with acids liberates toxic gas.

No information available.

10. STABILITY AND REACTIVITY

Chemical Stability Stable under normal conditions.

Conditions to Avoid Avoid exposure to heat. Avoid dust formation.

Materials to Avoid Avoid acids and oxidising agents.

Hazardous Decomposition

Products

Fire may produce irritating and toxic fumes. Contact with acids liberates toxic gas.

Hazardous Polymerisation No information available.

11. TOXICOLOGICAL INFORMATION

General Information Skin corrosion/irritation: Not classified. Based on available data, the classification criteria are not met.

Serious eye damage/irritation: Causes serious eye damage.

Respiratory/skin sensitisation: Not classified. Based on available data, the classification criteria are not met. Germ cell mutagenicity: Not classified. Based on available data, the classification criteria are not met. Carcinogenicity: Not classified. Based on available data, the classification criteria are not met. Reproductive toxicity: Not classified. Based on available data, the classification criteria are not met. STOT - single exposure: Not classified. Based on available data, the classification criteria are not met. STOT - repeated exposure: Not classified. Based on available data, the classification criteria are not met.

Aspiration hazard: Not classified. Based on available data, the classification criteria are not met.

Acute

Ingestion Acute Oral Toxicity:

- Rat LD50 >1,540 mg/kg

Carcinogen Category None

12. ECOLOGICAL INFORMATION

Ecotoxicity Acute aquatic toxicity:

Fish: LC50 = 150 - 220 mg/l (96 h)
Daphnia: EC50 = 89 mg/l (48 h)
Algae: EC50 = 48 mg/l (72 h)
Bacteria: EC50 = 56 mg/l (17 h)

Persistence/Degradability
No information available.

Mobility
No information available.

Environmental Fate Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Bioaccumulation Potential No information available.

Environmental Impact No Data Available

13. DISPOSAL CONSIDERATIONS

General InformationDispose of waste in accordance with current local/regional/national regulations. Recover if possible.

Special Precautions for Land Fill Send waste to an authorised disposal facility for incineration under controlled conditions.

14. TRANSPORT INFORMATION

Land Transport (Australia)

ADG Code

Proper Shipping Name SODIUM METABISULPHITE

Class No Data Available
Subsidiary Risk(s) No Data Available
No Data Available
UN Number No Data Available

Hazchem No Data Available
Pack Group No Data Available
Special Provision No Data Available

Comments NON-DANGEROUS GOODS: Not regulated for LAND transport.

Land Transport (Malaysia)

ADR

Proper Shipping Name SODIUM METABISULPHITE

Class No Data Available
Subsidiary Risk(s) No Data Available
No Data Available

UN NumberNo Data AvailableHazchemNo Data AvailablePack GroupNo Data AvailableSpecial ProvisionNo Data Available

Comments NON-DANGEROUS GOODS: Not regulated for LAND transport.

Land Transport (New Zealand)

NZS5433

Proper Shipping Name SODIUM METABISULPHITE

Class No Data Available
Subsidiary Risk(s) No Data Available

No Data Available

UN NumberNo Data AvailableHazchemNo Data AvailablePack GroupNo Data AvailableSpecial ProvisionNo Data Available

Comments NON-DANGEROUS GOODS: Not regulated for LAND transport.

Land Transport (United States of America)

US DOT

Proper Shipping Name SODIUM METABISULPHITE

ClassNo Data AvailableSubsidiary Risk(s)No Data Available

No Data Available

UN NumberNo Data AvailableHazchemNo Data AvailablePack GroupNo Data AvailableSpecial ProvisionNo Data Available

Comments NON-DANGEROUS GOODS: Not regulated for LAND transport.

Sea Transport

IMDG Code

Proper Shipping Name SODIUM METABISULPHITE

ClassNo Data AvailableSubsidiary Risk(s)No Data AvailableUN NumberNo Data AvailableHazchemNo Data AvailablePack GroupNo Data AvailableSpecial ProvisionNo Data AvailableEMSNo Data Available

Marine Pollutant No

Comments NON-DANGEROUS GOODS: Not regulated for SEA transport.

Air Transport

IATA DGR

Proper Shipping Name SODIUM METABISULPHITE

ClassNo Data AvailableSubsidiary Risk(s)No Data AvailableUN NumberNo Data AvailableHazchemNo Data Available

Pack GroupNo Data AvailableSpecial ProvisionNo Data Available

Comments NON-DANGEROUS GOODS: Not regulated for AIR transport.

National Transport Commission (Australia)

Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Dangerous Goods Classification NOT Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous

Goods by Road & Rail (ADG Code)

15. REGULATORY INFORMATION

General Information No Data Available

Poisons Schedule (Aust) 5

Environmental Protection Authority (New Zealand)

Hazardous Substances and New Organisms Amendment Act 2015

Approval Code HSR001548

National/Regional Inventories

Australia (AICS) Listed

Canada (DSL) Listed

Canada (NDSL) Not Listed

China (IECSC) Listed

Europe (EINECS) 231-673-0

Europe (REACh) 01-2119531326-45-

Japan (ENCS/METI) 1-502

Korea (KECI) KE-12701

Malaysia (EHS Register) Listed

New Zealand (NZIoC) Listed

Philippines (PICCS) Listed

Switzerland (Giftliste 1) Not Determined

Switzerland (Inventory of Notified

Substances)

Not Determined

Taiwan (NCSR) Listed

USA (TSCA) Listed

16. OTHER INFORMATION

Related Product Codes

SOMETA0200, SOMETA0300, SOMETA0400, SOMETA0500, SOMETA0600, SOMETA0700, SOMETA0705, SOMETA0707, SOMETA0708, SOMETA0710, SOMETA0715, SOMETA0720, SOMETA0725, SOMETA0800, SOMETA0900, SOMETA0905, SOMETA0910, SOMETA0911, SOMETA1000, SOMETA1001, SOMETA1002, SOMETA1003, SOMETA1004, SOMETA1005, SOMETA1006, SOMETA1007, SOMETA1008, SOMETA1009, SOMETA1010, SOMETA1011, SOMETA1012, SOMETA1013, SOMETA1014, SOMETA1015, SOMETA1016, SOMETA1017, SOMETA1018, SOMETA1019, SOMETA1020, SOMETA1021, SOMETA1022, SOMETA1023, SOMETA1024, SOMETA1025, SOMETA1026, SOMETA1100, SOMETA1101, SOMETA1102, SOMETA1103, SOMETA1200, SOMETA1205, SOMETA1250, SOMETA1300, SOMETA1301, SOMETA1311, SOMETA1315, SOMETA1400, SOMETA1500, SOMETA1600, SOMETA1700, SOMETA1705, SOMETA1708, SOMETA1710, SOMETA1711, SOMETA1800, SOMETA1801, SOMETA1802, SOMETA1803, SOMETA1804, SOMETA1805, SOMETA1806, SOMETA1807, SOMETA1808, SOMETA1809, SOMETA1810, SOMETA1811, SOMETA1812, SOMETA1813, SOMETA1814, SOMETA1815, SOMETA1816, SOMETA1817, SOMETA1818, SOMETA1827, SOMETA1828, SOMETA1829, SOMETA1830, SOMETA1831, SOMETA1832, SOMETA1833, SOMETA1834, SOMETA1835, SOMETA1836, SOMETA1837, SOMETA1900, SOMETA2000, SOMETA2100, SOMETA2150, SOMETA2200, SOMETA2300, SOMETA2400, SOMETA2401, SOMETA2402, SOMETA2403, SOMETA2404, SOMETA2405, SOMETA2406, SOMETA2407, SOMETA2408, SOMETA2409, SOMETA2410, SOMETA2411, SOMETA2412, SOMETA2413, SOMETA2414, SOMETA2415, SOMETA2416, SOMETA2417, SOMETA2418, SOMETA2419, SOMETA2420, SOMETA2421, SOMETA2422, SOMETA2423, SOMETA2424, SOMETA2425, SOMETA2426, SOMETA2427, SOMETA2428, SOMETA2500, SOMETA2501, SOMETA2502, SOMETA2503, SOMETA2504, SOMETA2505, SOMETA2506, SOMETA2600, SOMETA2601, SOMETA2700, SOMETA2701, SOMETA2800, SOMETA2900, SOMETA3000, SOMETA3100, SOMETA3101, SOMETA3106, SOMETA3200, SOMETA3201, SOMETA3202, SOMETA3300, SOMETA3400, SOMETA3500, SOMETA3501, SOMETA3502, SOMETA3600, SOMETA3700, SOMETA3800, SOMETA3900, SOMETA3901, SOMETA3902, SOMETA3903, SOMETA3904, SOMETA3905, SOMETA3906, SOMETA3909, SOMETA3910, SOMETA3911, SOMETA4000, SOMETA4001, SOMETA4002, SOMETA4003, SOMETA4100, SOMETA4101, SOMETA4102, SOMETA4103, SOMETA4104, SOMETA4105, SOMETA4106, SOMETA4107, SOMETA4108, SOMETA4200, SOMETA4201, SOMETA4202, SOMETA4203, SOMETA4204, SOMETA4205, SOMETA4206, SOMETA4207, SOMETA4208, SOMETA4209, SOMETA4210, SOMETA4211, SOMETA4212, SOMETA4213, SOMETA4214, SOMETA4215, SOMETA4300, SOMETA4301, SOMETA4302, SOMETA4303, SOMETA4304, SOMETA4400, SOMETA4500, SOMETA4501, SOMETA4502, SOMETA4600, SOMETA4700, SOMETA4701, SOMETA4800, SOMETA4900, SOMETA5000, SOMETA5001, SOMETA5002, SOMETA5100, SOMETA5101, SOMETA5102, SOMETA5200, SOMETA5201, SOMETA5300, SOMETA5301, SOMETA5400, SOMETA5401, SOMETA5500, SOMETA5501, SOMETA5502, SOMETA5600, SOMETA5601, SOMETA5700, SOMETA5701, SOMETA5800, SOMETA5801, SOMETA5802, SOMETA5900, SOMETA5901, SOMETA6000, SOMETA6001, SOMETA6002, SOMETA6100, SOMETA6200, SOMETA6201, SOMETA6300, SOMETA6400, SOMETA6500, SOMETA6600, SOMETA6700, SOMETA7000, SOMETA7200, SOMETA7400, SOMETA7401, SOMETA7430, SOMETA7432, SOMETA7500, SOMETA7600, SOMETA7700, SOMETA7701, SOMETA7702, SOMETA7710, SOMETA7800, SOMETA7801, SOMETA7820, SOMETA7850, SOMETA7852, SOMETA7860, SOMETA7900, SOMETA7901, SOMETA7905, SOMETA7910, SOMETA7920, SOMETA8000, SOMETA8100, SOMETA8200, SOMETA8210, SOMETA8215, SOMETA8220, SOMETA8500, SOMETA8600, SOMETA8700, SOMETA8800, SOMETA8900, SOMETA9000, SOMETA9100, SOMETA9200, SOMETA9300, SOMETA9500, SOMETA9600, SOMETA9800, SOMETA9900, SOMETB1000, SOMETB1001, SOMETB2000

Revision

Revision Date

Key/Legend

29 Jun 2017

< Less Than
> Greater Than

AICS Australian Inventory of Chemical Substances

atm Atmosphere

CAS Chemical Abstracts Service (Registry Number)

cm² Square CentimetresCO2 Carbon Dioxide

COD Chemical Oxygen Demand **deg C (°C)** Degrees Celcius

EPA (New Zealand) Environmental Protection Authority of New Zealand

deg F (°F) Degrees Farenheit

g Grams

g/cm³ Grams per Cubic Centimetre

g/I Grams per Litre

HSNO Hazardous Substance and New Organism **IDLH** Immediately Dangerous to Life and Health **immiscible** Liquids are insoluable in each other.

inHg Inch of MercuryinH2O Inch of WaterK Kelvin

kg Kilogram

kg/m³ Kilograms per Cubic Metre

lb Pound

LC50 LC stands for lethal concentration. LC50 is the concentration of a material in air which causes the death of 50% (one half) of a group of test animals. The material is inhaled over a set period of time, usually 1 or 4 hours. **LD50** LD stands for Lethal Dose. LD50 is the amount of a material, given all at once, which causes the death of 50%

(one half) of a group of test animals.

Itr or **L** Litre

m³ Cubic Metre

mbar Millibar

mg Milligram

mg/24H Milligrams per 24 Hours

mg/kg Milligrams per Kilogram

mg/m³ Milligrams per Cubic Metre

Misc or **Miscible** Liquids form one homogeneous liquid phase regardless of the amount of either component present.

mm Millimetre

mmH20 Millimetres of Water

mPa.s Millipascals per Second

N/A Not Applicable

NIOSH National Institute for Occupational Safety and Health

NOHSC National Occupational Heath and Safety Commission

OECD Organisation for Economic Co-operation and Development

Oz Ounce

PEL Permissible Exposure Limit

Pa Pascal

ppb Parts per Billion

ppm Parts per Million

ppm/2h Parts per Million per 2 Hours

ppm/6h Parts per Million per 6 Hours

psi Pounds per Square Inch

R Rankine

RCP Reciprocal Calculation Procedure

STEL Short Term Exposure Limit

TLV Threshold Limit Value

tne Tonne

TWA Time Weighted Average

ug/24H Micrograms per 24 Hours

UN United Nations

wt Weight