



Sodium Bisulphate

AGent

AGent SDS: Sodium Bisulphate [2026.01]

Version No: 2026.01

Safety Data Sheet according to WHS Regulations (Hazardous Chemicals) Amendment 2020 and the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Hazard Alert Code: 3

Issue Date: June 2026

Print Date: (auto-fills on print)

AGENT.GHS.AUS.EN.E

SECTION 1 Identification of the substance / mixture and of the company / undertaking

Product Identifier

Product name	Sodium Bisulphate
Chemical Name	Sodium hydrogen sulphate (sodium bisulphate)
Synonyms	Sodium hydrogen sulphate; dry acid; NaHSO ₄
Proper shipping name	Not Applicable — NON-DANGEROUS GOODS
Chemical formula	NaHSO ₄
Other means of identification	Sodium Bisulphate [2026.01]

Relevant identified uses of the substance or mixture and uses advised against

Identified uses	Mineral fusion; carbonic-acid baths; metal pickling; wool carbonising; leather bleaching / swelling; swimming-pool pH adjustment; magnesia cement.
Uses advised against	Not for unprotected domestic / consumer use. Forms a corrosive acid on contact with water.

Details of the manufacturer or supplier of the safety data sheet

Registered company name	AGent Sales & Services Pty Ltd
Address	38 May Holman Drive, Bassendean WA 6054, Australia
Telephone	(+61 8) 6270 4500 / 1300 833 844
Website	agentsales.com.au
Email	admin@agentsales.com.au

Emergency telephone number

Association / Organisation	Hazrad (outside 24-hour emergency response provider)
Emergency telephone numbers	08 9418 4200 (24-hour) — answered by Hazrad on AGent's behalf
Other emergency telephone numbers	Poisons Information Centre 131 126 (Australia) / 0800 764 766 (NZ)

SECTION 2 Hazards identification

Classification of the substance or mixture

Classified as a HAZARDOUS CHEMICAL under the GHS criteria adopted by Safe Work Australia. NOT a Dangerous Good under the ADG Code — NON-DANGEROUS GOODS for transport. Forms a corrosive acid solution on contact with water / moisture.

Poisons Schedule (SUSMP)	Schedule 5 (S5)
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Classification

- Serious Eye Damage/Eye Irritation Category 1 — H318

Label elements

Hazard pictogram(s)	
Signal word	DANGER

Hazard statement(s)

- H318 — Causes serious eye damage.

Supplementary statement(s)

In contact with water / moisture forms an acidic solution that is corrosive and reacts with many metals liberating flammable hydrogen. Very irritating to skin / respiratory tract when wet.

Precautionary statement(s) Prevention

- P280 — Wear protective gloves / eye protection / face protection.
- P264 — Wash hands thoroughly after handling.

Precautionary statement(s) 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 CENTRE / doctor.
- Not Applicable — no further mandatory label response statements.

Precautionary statement(s) Storage

- P403+P233 — Store in a well-ventilated place. Keep container tightly closed.
- P405 — Store locked up.

Precautionary statement(s) Disposal

- P501 — Dispose of contents/container to an approved waste disposal plant.

Other hazards

Hygroscopic dry acid. Forms corrosive solution with water. Reacts with metals (hydrogen) and bases. Decomposition emits sulphur and sodium oxides.

SECTION 3 Composition / information on ingredients

Substances

See section below for composition of Mixtures.

Mixtures

CAS No.	% [weight]	Name	Classification
7681-38-1	> 99 – 100	Sodium hydrogen sulphate (sodium bisulphate)	Eye Dam. 1 (H318)

SECTION 4 First aid measures

Description of first aid measures

Eye Contact

Rinse thoroughly with plenty of running water for at least 15 minutes, keeping eyelids open. Serious eye damage — consult a physician / seek immediate medical attention.

Skin Contact

Wash off with soap and plenty of water. Very irritating when wet — if irritation occurs, consult a physician.

Inhalation

Move person into fresh air. If not breathing, give artificial respiration. Consult a physician (dust / mist is irritating to the respiratory tract).

Ingestion

Rinse mouth with water. Never give anything by mouth to an unconscious person. Consult a physician. Contact the Poisons Information Centre (Australia 131 126; New Zealand 0800 764 766).

Most important symptoms and effects, both acute and delayed

Causes serious eye damage. Skin: very irritating when wet. Inhalation of dust / mist is very irritating to the respiratory system. Ingestion may cause nausea, vomiting, headaches, dizziness and GI irritation.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically. Manage as an acid exposure. Contact the Poisons Information Centre (Australia 131 126; New Zealand 0800 764 766).

First Aid facilities

Eye wash facilities and a safety shower must be available in any area where this product is handled.

SECTION 5 Firefighting measures

Extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide suited to the surrounding fire.

Special hazards arising from the substance or mixture

Fire Incompatibility

On heating / decomposition emits sulphur and sodium oxides. Acid solution reacts with metals liberating flammable hydrogen.

Advice for firefighters

Fire Fighting

Wear self-contained breathing apparatus (SCBA) for firefighting if necessary.

Fire / Explosion Hazard

Non-combustible solid. Sulphur / sodium oxide fumes on heating; flammable hydrogen from the acid solution on metal contact.

HAZCHEM Code	Not Applicable
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SECTION 6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

See Section 8 for personal protective equipment requirements.

Use PPE. Avoid dust formation and breathing dust / mist. Ensure adequate ventilation. Evacuate non-essential personnel. See Section 8.

Environmental precautions

Prevent product entering drains. Discharge to the environment must be avoided. If contamination of sewers / waterways occurs, advise local emergency services.

Methods and material for containment and cleaning up

Minor Spills

Sweep / shovel up with dust-binding material or an industrial vacuum, avoiding dust. Transfer to a labelled container for safe disposal per Section 13. Neutralise residue cautiously.

Major Spills

Isolate and ventilate. Wear full PPE. Contain and collect as above; neutralise cautiously. Prevent run-off to waterways. Notify the Environmental Protection Authority if waterways are threatened.

SECTION 7 Handling and storage

Precautions for safe handling

Safe handling

Avoid contact with skin and eyes and formation of dust / aerosols. Provide exhaust ventilation where dust forms. Keep away from ignition (hydrogen from acid solution / metals). Observe good personal hygiene. Use PPE per Section 8.

Other information

Keep containers tightly closed; protect from heat and moisture. Store away from incompatible materials (see Section 10).

Conditions for safe storage, including any incompatibilities

Suitable container

Store in a cool, dry, well-ventilated area. Keep containers tightly closed (hygroscopic). Protect from heat and moisture. Store away from incompatible materials (see Section 10).

Storage incompatibility

Strong bases; oxidising agents; metals; water (forms corrosive acid); ignition sources. Store away from incompatible materials (see Section 10).

SECTION 8 Exposure controls / personal protection

Control parameters

Occupational Exposure Limits (OEL)

Reference: Safe Work Australia, "Workplace Exposure Limits for Airborne Contaminants" (April 2024) by Safe Work Australia.

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
SWA WEL 2024	Dust not otherwise specified	Sodium bisulphate (dust)	10 mg/m ³ (inspirable) / 3 mg/m ³ (respirable)	Not assigned in SWA WEL 2024	Not assigned in SWA WEL 2024	No specific WEL for sodium bisulphate; control to dust (n.o.s.) limits.

Emergency Limits

Ingredient	TEEL-1	TEEL-2	TEEL-3
Sodium bisulphate	Not established (DOE PAC)	Not established (DOE PAC)	Not established (DOE PAC)
Ingredient	Original IDLH	Revised IDLH	
Sodium bisulphate	Not established (NIOSH)	Not established (NIOSH)	

MATERIAL DATA

No whole-mixture occupational exposure data are available; manage on a per-component basis (above).

Exposure controls

Appropriate engineering controls

Apply the hierarchy of controls (WHS Reg 36). Where elimination or substitution is not reasonably practicable: provide local exhaust ventilation at points of vapour / mist generation; use closed transfer systems where possible; ensure general ventilation is adequate to keep airborne concentrations below the applicable WEL. Document the risk assessment supporting the chosen control hierarchy.

Individual protection measures, such as personal protective equipment

Eye and face protection

Safety glasses with side shields (AS/NZS 1336 & 1337) as a minimum. Chemical goggles and a face shield (AS/NZS 1336 & 1337) where splash potential exists.

Skin protection

See Hand protection below.

Hands/feet protection

Wear protective gloves and protective clothing appropriate for the risk (AS 2161 & 2919, AS/NZS 2210). Chemical safety goggles with side shields (AS/NZS 1336 & 1337). Use a full-face / particulate respirator where dust is generated (AS/NZS 1715 & 1716).

Body protection

See Other protection below.

Other protection

Long-sleeved chemical-resistant protective clothing and apron (PVC or equivalent)

Respiratory protection

If a risk assessment indicates an inhalation risk exists, wear a half-face or full-face respirator with appropriate filter (selection per AS/NZS 1715; respirator per AS/NZS 1716). Specific cartridge / canister recommendation to be confirmed during respiratory protection risk assessment per AS/NZS 1715.

SECTION 9 Physical and chemical properties

Information on basic physical and chemical properties

Property	Value
Appearance	Solid — white crystals
Physical state	Solid (crystalline)
Odour	No data available in source SDS
Odour threshold	No data available in source SDS
pH (as supplied)	1.3 (1% solution) — strongly acidic
Melting point / freezing point (°C)	~315 °C
Initial boiling point and boiling range (°C)	Decomposes
Flash point (°C)	Not applicable — non-combustible solid
Evaporation rate	Not applicable
Flammability	Not flammable
Upper Explosive Limit (%)	Not applicable
Lower Explosive Limit (%)	Not applicable
Vapour pressure (kPa)	Not applicable
Solubility in water	285 g/L at 25 °C (completely soluble)
Vapour density (Air = 1)	Not applicable
Relative density (Water = 1)	2.43 g/cm ³
Partition coefficient n-octanol/water	Not applicable — ionic
Auto-ignition temperature (°C)	Not applicable — non-combustible
Decomposition temperature (°C)	No data available in source SDS
Viscosity (cSt)	Not applicable — solid
Molecular weight (g/mol)	120.06 g/mol
Taste	Not applicable — do not taste
Explosive properties	None known
Oxidising properties	None known
Surface Tension (dyn/cm or mN/m)	Not applicable
Volatile Component (% vol)	None
Gas group	Not applicable
pH as a solution (1%)	Strongly acidic (~1.3)
VOC g/L	0 g/L — inorganic solid acid; no VOC

SECTION 10 Stability and reactivity

Reactivity	In contact with water forms a corrosive acid solution; acid solutions react with many metals forming hydrogen. See Section 7 / 10.
Chemical stability	Stable under normal conditions of use, storage and temperature.
Possibility of hazardous reactions	Hazardous polymerisation has not been reported.
Conditions to avoid	Exposure to moisture / water vapour; heat.
Incompatible materials	See Section 7. Strong bases; oxidising agents; metals; water; ignition sources.
Hazardous decomposition products	Sulphur and sodium oxides on strong heating.

SECTION 11 Toxicological information

Information on toxicological effects

Inhaled

Dust / mist is very irritating to the respiratory system.

Ingestion

May cause nausea, vomiting, headaches, dizziness and GI irritation.

Skin Contact

Very irritating to skin when wet (acid solution).

Eye

Causes serious eye damage (H318) — risk of permanent injury.

Chronic

No component $\geq 0.1\%$ is an IARC carcinogen. No specific chronic data in source SDS.

Per-ingredient toxicity

Ingredient	TOXICITY	IRRITATION
Sodium bisulphate	Acute toxicity data not stated in source SDS (oral LD50 rat ~2490 mg/kg, literature)	Serious eye damage (rabbit); very irritating to skin when wet

Hazard checklist (whole-product classification basis)

Hazard endpoint	Classified	Hazard endpoint	Classified
Acute Toxicity	—	Carcinogenicity	—
Skin Irritation/Corrosion	—	Reproductive Toxicity	—
Serious Eye Damage/Irritation	✓	STOT — Single Exposure	—
Respiratory or Skin Sensitisation	—	STOT — Repeated Exposure	—
Mutagenicity	—	Aspiration Hazard	—

Legend: ✓ = Data available to make classification; — = Data either not available or does not fill the criteria for classification.

Information on possible routes of exposure

Absorbed by inhalation, ingestion, skin and eye contact.

Additional Information

RTECS	VZ1860000
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SECTION 12 Ecological information

Toxicity

Ingredient	Endpoint	Test Duration	Species	Value	Source
Sodium bisulphate	pH effect	Not applicable	Aquatic organisms (general)	Harmful via depression of pH; no quantitative data in source SDS	AGent SDS
Sodium bisulphate	No quantitative data	Not applicable	Not applicable	No quantitative ecotoxicity data in source SDS	AGent SDS

Environmental precaution: Prevent entry to drains, waterways and soak-aways. Notify the relevant Environmental Protection Authority if waterway contamination occurs.

Persistence and degradability

Ingredient	Persistence: Water / Soil	Persistence: Air
Sodium bisulphate	Not applicable in the OECD sense — inorganic; dissociates to sodium and sulphate; acidity neutralises on dilution.	Not applicable — non-volatile solid.

Bioaccumulative potential

Ingredient	Bioaccumulation
Sodium bisulphate	Not expected to bioaccumulate (inorganic salt).

Mobility in soil

Ingredient	Mobility
Sodium bisulphate	Soluble and mobile in water; acidity neutralises on dilution.

Other adverse effects

Acidic in solution — may depress pH of waterways. Avoid uncontrolled discharge.

SECTION 13 Disposal considerations**Waste treatment methods****Product / Packaging disposal**

- Recycle wherever possible.
- Ensure waste disposal conforms to all relevant local, state and federal authority waste disposal regulations.
- Do NOT discharge into sewers or waterways.
- Empty containers should be returned via AGent's Closed Loop container return program where applicable.
- Whatever cannot be saved for recovery or recycling should be managed through an approved waste disposal facility.
- Cautiously neutralise before disposal; dispose of in accordance with local, state and federal regulations.

SECTION 14 Transport information

Labels Required	Not Applicable — not regulated for transport
Marine Pollutant	No
HAZCHEM Code	Not Applicable

Land transport (ADG)

UN number	Not Applicable — NON-DANGEROUS GOODS
UN proper shipping name	Not Applicable — NON-DANGEROUS GOODS
Transport hazard class(es)	NON-DANGEROUS GOODS — not classified under the ADG Code for transport by road or rail.
Packing group	Not Applicable
Environmental hazard	Not Applicable
Special precautions for user	Not Applicable — not regulated for transport.
ERG / EIP number	Not assigned — NON-DANGEROUS GOODS.

Air transport (ICAO-IATA / DGR)

UN number	Not Applicable — NON-DANGEROUS GOODS
UN proper shipping name (lowercase)	Not Applicable — NON-DANGEROUS GOODS
ICAO/IATA Class	ERG Code: Not Applicable
Packing group	Not Applicable
Environmental hazard	Not Applicable
Special provisions	Not Applicable — not regulated for transport by air.
Cargo Only Packing Instructions	Not Applicable — AGent does not transport this product by air. Refer to land transport (ADG) above for the applicable classification.
Cargo Only Max Qty/Pack	Not Applicable — AGent does not transport this product by air. Refer to land transport (ADG) above for the applicable classification.
Passenger and Cargo Packing Instructions	Not Applicable — AGent does not transport this product by air. Refer to land transport (ADG) above for the applicable classification.
Passenger and Cargo Max Qty/Pack	Not Applicable — AGent does not transport this product by air. Refer to land transport (ADG) above for the applicable classification.

Sea transport (IMDG-Code / GGVSee)

UN number	Not Applicable — NON-DANGEROUS GOODS
UN proper shipping name	Not Applicable — NON-DANGEROUS GOODS
IMDG Class	NON-DANGEROUS GOODS
Packing group	Not Applicable
Environmental hazard	Not a Marine Pollutant
EMS Number	Not Applicable
Special provisions	Not Applicable — not regulated for transport by sea.

Transport in bulk according to MARPOL Annex II and the IBC Code

Not Applicable — AGent does not transport this product in bulk by sea.

Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code

Product name	Group
Sodium Bisulphate	Not Applicable — AGent does not transport this product in bulk by sea.

Transport in bulk in accordance with the IGC Code

Product name	Ship Type
Sodium Bisulphate	Not Applicable — AGen does not transport this product in bulk by sea.

SECTION 15 Regulatory information**Safety, health and environmental regulations / legislation specific for the substance or mixture**

SODIUM HYDROGEN SULPHATE (CAS 7681-38-1) is found on / assessed against the following regulatory lists:

- Australia Hazardous Chemical Information System (HCIS): Eye Dam. 1
- Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP): Schedule 5
- Australian Inventory of Industrial Chemicals (AIIC): Listed
- IARC Group classification: Not classified
- Schedule 10 of the model WHS Regulations (prohibited / restricted carcinogens): Not listed
- Schedule 14 of the model WHS Regulations (health monitoring trigger): Not listed

Additional Regulatory Information

Subject to: Work Health and Safety (General) Regulations 2022 (WA); "Workplace Exposure Limits for Airborne Contaminants" (April 2024) by Safe Work Australia; Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code) current edition.

National Inventory Status

Country / Inventory	Listed
Australia (AIIC / AICS)	Yes
Canada (DSL)	Not applicable — AGen does not export this product
Canada (NDSL)	Not applicable — AGen does not export this product
China (IECSC)	Not applicable — AGen does not export this product
Europe (EINECS / ELINCS / NLP)	Not applicable — AGen does not export this product
Japan (ENCS)	Not applicable — AGen does not export this product
Korea (KECI)	Not applicable — AGen does not export this product
New Zealand (NZIoC)	Not applicable — AGen does not export this product
Philippines (PICCS)	Not applicable — AGen does not export this product
USA (TSCA)	Not applicable — AGen does not export this product
Taiwan (TCSI)	Not applicable — AGen does not export this product
Mexico (INSQ)	Not applicable — AGen does not export this product
Vietnam (NCI)	Not applicable — AGen does not export this product
Russia (FBEPH)	Not applicable — AGen does not export this product

Legend: Yes = All CAS declared ingredients are on the inventory; No = One or more CAS listed ingredients are not on the inventory (may be exempt or require registration).

SECTION 16 Other information

Revision Date	June 2026
Initial Date	June 2026 (AGent 2026 format)

SDS Version Summary

Version	Date of Update	Sections Updated
2026.01 (AGent 2026 format)	June 2026	Reformatted from legacy V2.2 to AGent 2026 layout. §8 updated to SWA WEL 2024 (dust n.o.s.); removed superseded legacy abbreviations and exposure-standard references; AICS→AIIC. Classification unchanged (Eye Dam 1; Danger; NON-DANGEROUS GOODS).
V2.2 (legacy AGent format)	Pre-2026	Older format. Eye Dam 1 (H318); Danger; NON-DANGEROUS GOODS.

Other information

This SDS is intended as a hazard communication tool to assist in workplace Risk Assessment. It is not an Australian Standard or a definitive document.

Definitions and abbreviations

Abbreviation	Definition
ADG	Australian Dangerous Goods Code
AICS / AIIC	Australian Inventory of Industrial Chemicals (formerly AICS)
AUH	Additional / Australian Hazard statements
BCF	Bioconcentration Factor
BEI	Biological Exposure Index
CAS	Chemical Abstracts Service Registry Number
DNEL	Derived No Effect Level
DSEN	Dermal sensitiser (SWA WEL 2024 notation)
EC50	Effect Concentration causing effect in 50% of test population
EMS	IMDG Emergency Schedule
ERG / EIP	Emergency Response Guide / Emergency Information Panel (SAA/SNZ HB76)
ES	Exposure Standard (legacy term — now WEL)
GHS	Globally Harmonised System of Classification and Labelling
HCIS	Hazardous Chemical Information System (Safe Work Australia)
IARC	International Agency for Research on Cancer
IDLH	Immediately Dangerous to Life or Health
LC50	Lethal Concentration causing death in 50% of test population
LD50	Lethal Dose causing death in 50% of test population
LOAEL	Lowest Observed Adverse Effect Level
NOAEL	No Observed Adverse Effect Level
NOEC	No Observed Effect Concentration
OEL	Occupational Exposure Limit
OTO	Ototoxic (SWA WEL 2024 notation)
PC-STEL	Permissible Concentration — Short Term Exposure Limit
PC-TWA	Permissible Concentration — Time Weighted Average
PNEC	Predicted No Effect Concentration
RSEN	Respiratory sensitiser (SWA WEL 2024 notation)
SDS	Safety Data Sheet
Sk	Skin notation — absorption through the skin a significant route
STEL	Short Term Exposure Limit (15 min TWA)
SUSMP	Standard for the Uniform Scheduling of Medicines and Poisons
SWA	Safe Work Australia
TEEL	Temporary Emergency Exposure Limit
TLV	Threshold Limit Value
TWA	Time Weighted Average (8 hr / 40 hr week)
WEL	Workplace Exposure Limit (Safe Work Australia, April 2024)
WHS	Work Health and Safety

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