



Sodium Tetraborate

AGent

AGent SDS: Sodium Tetraborate [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: 2

Issue Date: June 2026

Print Date: (auto-fills on print)

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

Product Identifier

Product name	Sodium Tetraborate
Chemical Name	Sodium tetraborate (pentahydrate)
Synonyms	Borax; disodium tetraborate; sodium borate; borax pentahydrate
Proper shipping name	Not Applicable — NON-DANGEROUS GOODS (Sodium tetraborate pentahydrate)
Chemical formula	$\text{Na}_2\text{B}_4\text{O}_7 \cdot 5\text{H}_2\text{O}$
Other means of identification	Sodium Tetraborate [2026.01]

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

Identified uses	Detergent / cleaning builder; flux; pH buffer; fungicide / preservative; glass and ceramics; fertiliser.
Uses advised against	Not for use where reproductive exposure to borates is a concern (see Section 2). Avoid generating dust.

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

HAZARDOUS CHEMICAL. NON-DANGEROUS GOODS for transport by road or rail. Scheduled Poison S5. Classified under the WHS Regulations — reproductive toxicant.

Poisons Schedule (SUSMP)	Schedule 5 (S5) — SUSMP
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Classification

- Reproductive Toxicity Category 1B — H360 (H360FD)
- Serious Eye Damage/Eye Irritation Category 2A — H319

Label elements

Hazard pictogram(s)	
Signal word	Danger

Hazard statement(s)

- H360 — May damage fertility. May damage the unborn child. (H360FD)
- H319 — Causes serious eye irritation.

Supplementary statement(s)

Not Applicable

Precautionary statement(s) Prevention

- P201 — Obtain special instructions before use.
- P202 — Do not handle until all safety precautions have been read and understood.
- P261 — Avoid breathing dust.
- P264 — Wash hands thoroughly after handling.
- P280 — Wear protective gloves / eye protection / face protection.

Precautionary statement(s) Response

- P308+P313 — IF exposed or concerned: Get medical advice / attention.
- P305+P351+P338 — IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
- P337+P313 — If eye irritation persists: Get medical advice / attention.

Precautionary statement(s) Storage

- P405 — Store locked up.

Precautionary statement(s) Disposal

- P501 — Dispose of contents/container in accordance with local, state and federal regulations.

Other hazards

Reproductive toxicant — minimise exposure. Forms boric acid in solution. Decomposes on strong heating.

SECTION 3 Composition / information on ingredients

Substances

See section below for composition of Mixtures.

Mixtures

CAS No.	% [weight]	Name	Classification
1303-96-4	99 – 100	Sodium tetraborate (pentahydrate)	Repr. 1B (H360); Eye Irrit. 2A (H319)

SECTION 4 First aid measures

Description of first aid measures

Eye Contact

Immediately rinse with plenty of running water for at least 15 minutes, keeping eyelids open. Check for and remove any contact lenses if easy to do. Continue rinsing. If irritation persists, seek medical advice.

Skin Contact

Wash affected areas with soap and running water. Remove and launder contaminated clothing before reuse. If irritation occurs, seek medical advice.

Inhalation

Remove person to fresh air and keep comfortable for breathing. Seek medical advice if symptoms persist.

Ingestion

Rinse mouth with water. Do NOT induce vomiting. Seek medical advice. Contact the Poisons Information Centre.

Most important symptoms and effects, both acute and delayed

Reproductive toxicant — may damage fertility or the unborn child on significant / repeated exposure. Causes serious eye irritation. Dust may irritate the respiratory tract.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically. 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**

Non-combustible. Use extinguishing media suitable for the surrounding fire.

Special hazards arising from the substance or mixture**Fire Incompatibility**

Decomposition on strong heating may emit boron / sodium oxides.

Advice for firefighters**Fire Fighting**

Wear self-contained breathing apparatus (SCBA) where decomposition fumes are present.

Fire / Explosion Hazard

Non-combustible solid.

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.

Avoid generating / breathing dust. Wear PPE per Section 8. Clear unprotected personnel from the area.

Environmental precautions

Prevent product entering drains. If contamination of sewers / waterways occurs, advise local emergency services.

Methods and material for containment and cleaning up**Minor Spills**

Sweep / vacuum up avoiding dust. Transfer to a labelled container for disposal. Rinse the area with water afterwards.

Major Spills

Contain and collect as above. 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**

Obtain special instructions before use. Avoid generating and breathing dust. Avoid eye contact. Minimise exposure (reproductive toxicant). Observe strict personal hygiene; wash hands before eating.

Other information

Keep containers closed when not in use. Store away from foodstuffs and incompatible materials (Section 10).

Conditions for safe storage, including any incompatibilities**Suitable container**

Store in a cool, dry, well-ventilated place. Keep containers closed. Store locked up away from foodstuffs and incompatible materials (Section 10). Scheduled Poison S5.

Storage incompatibility

Strong acids; strong oxidising agents; reactive metals. 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	Sodium tetraborate (borates)	Sodium tetraborate (inhalable dust)	1 mg/m ³ (inhalable, as borate)	Not assigned	Not assigned	Borate exposure standards vary by hydrate; control inhalable dust.

Emergency Limits

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

Protective gloves and protective clothing (AS 2161, AS/NZS 2210). Chemical goggles / safety glasses with side shields (AS/NZS 1336 & 1337). Where dust exceeds the exposure limit, a P1/P2 particulate respirator (AS/NZS 1715 & 1716). Eye-wash facilities should be available.

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 crystalline powder / granules
Physical state	Solid
Odour	Odourless
Odour threshold	No data available in source SDS
pH (as supplied)	9.2 (10 g/L @ 20 °C)
Melting point / freezing point (°C)	62 °C (loses water of crystallisation)
Initial boiling point and boiling range (°C)	1575 °C
Flash point (°C)	Not applicable — non-combustible
Evaporation rate	Not applicable
Flammability	Not flammable (non-combustible)
Upper Explosive Limit (%)	Not applicable
Lower Explosive Limit (%)	Not applicable
Vapour pressure (kPa)	Negligible
Solubility in water	Soluble in water (~36 g/L @ 20 °C; increases with temperature)
Vapour density (Air = 1)	Not applicable
Relative density (Water = 1)	1.81
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)	291.3 g/mol (pentahydrate)
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)	Water of crystallisation
Gas group	Not applicable
pH as a solution (1%)	Alkaline (~9)
VOC g/L	0 g/L — inorganic; no VOC

SECTION 10 Stability and reactivity

Reactivity	Stable under normal conditions. See Section 10.
Chemical stability	Stable under normal storage conditions.
Possibility of hazardous reactions	Hazardous polymerisation will not occur.
Conditions to avoid	Dust generation; strong heating; contact with strong acids.
Incompatible materials	See Section 7. Strong acids; strong oxidisers; reactive metals.
Hazardous decomposition products	Boron / sodium oxides on strong heating.

SECTION 11 Toxicological information

Information on toxicological effects

Inhaled

Dust may irritate the respiratory tract.

Ingestion

May cause GI irritation, nausea, vomiting. Reproductive effects on significant exposure.

Skin Contact

Low irritation on intact skin; do not apply to broken skin.

Eye

Causes serious eye irritation.

Chronic

Reproductive toxicant (Category 1B) — may damage fertility and the unborn child. No component $\geq 0.1\%$ is an IARC carcinogen.

Per-ingredient toxicity

Ingredient	TOXICITY	IRRITATION
Sodium tetraborate	Oral LD50 (rat): ~2,660 mg/kg	Eye — serious irritant (Eye Irrit. 2A); Reproductive toxicant (Repr. 1B)

Hazard checklist (whole-product classification basis)

Hazard endpoint	Classified	Hazard endpoint	Classified
Acute Toxicity	—	Carcinogenicity	—
Skin Irritation/Corrosion	—	Reproductive Toxicity	✓ Reproductive Toxicity Category 1B (H360FD)
Serious Eye Damage/Irritation	✓ Serious Eye Irritation Category 2A (H319)	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

May be absorbed by ingestion, inhalation of dust, eye and skin (broken) contact.

Additional Information

RTECS	VZ2275000 (sodium tetraborate)
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SECTION 12 Ecological information

Toxicity

Ingredient	Endpoint	Test Duration	Species	Value	Source
Sodium tetraborate	LC50 (fish)	96 h	Fish	Low to moderate toxicity (typically > 100 mg/L)	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
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Sodium tetraborate	Dissolves to borate / boric acid; borates are persistent (do not degrade), but are a plant micronutrient at low levels.	Not applicable — non-volatile solid.
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Bioaccumulative potential

Ingredient	Bioaccumulation
Sodium tetraborate	Does not bioaccumulate (inorganic, ionic).

Mobility in soil

Ingredient	Mobility
Sodium tetraborate	Soluble and mobile in water.

Other adverse effects

Borates are toxic to plants at elevated levels. Avoid uncontrolled discharge to soil / waterways.

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.
- Dispose of in accordance with local, state and federal regulations.

SECTION 14 Transport information

Labels Required	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 (Sodium tetraborate pentahydrate)
Transport hazard class(es)	NON-DANGEROUS GOODS by the criteria of the ADG Code for transport by road or rail.
Packing group	Not Applicable
Environmental hazard	Not a Marine Pollutant
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	Not regulated for transport by air
Packing group	Not Applicable
Environmental hazard	Not environmentally hazardous
Special provisions	Not Applicable.
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 (Sodium tetraborate pentahydrate)
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 Tetraborate	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 Tetraborate	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 TETRABORATE (CAS 1303-96-4) is found on / assessed against the following regulatory lists:

- Australia Hazardous Chemical Information System (HCIS): Repr. 1B (H360FD); Eye Irrit. 2A (H319)
- Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP): Schedule 5 (S5)
- 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 the legacy V2.2 document to AGent 2026 SDS layout. §2 H360 expressed as H360FD (fertility + development) for completeness, consistent with the Pentair AquaMIN borax component. §8 to SWA WEL 2024 (borates); AICS→AIIIC. Classification unchanged (Repr 1B / Eye Irrit 2A; NON-DG; S5).
V2.2 (legacy AGent format)	Pre-2026	Legacy AGent SDS. Declared Repr 1B (H360) + Eye Irrit 2A (Danger); NON-DANGEROUS GOODS; S5.

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 / AIIIC	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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