

SAFETY DATA SHEET

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: Borax

Other Identifier: Borax decahydrate, Disodium tetraborate decahydrate

Recommended Use: Cleaning applications

Supplier: Big Bubble
ABN: 51 290 656 636

Street Address: 18 Elliott Street
Midvale
Western Australia

Telephone Number: +61 08 9274 1992

Poisons Information Centre: 131 126 Australia

2. HAZARDS IDENTIFICATION

Road and Rail; Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS.

Globally Harmonised System

Hazard Classification

Hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS)

Hazard Categories

Toxic to reproduction – Category 1B
Serious eye damage/irritation – Category 2A
Acute toxicity (Oral) – Category 5

Pictogram



Name of pictogram

Exclamation mark, health hazard

Signal Word

Danger

SAFETY DATA SHEET

Hazard Statements **H303** May be harmful if swallowed.
H319 Causes serious eye irritation.
H360FD May damage fertility. May damage the unborn child.

Precautionary Statement

General **P101** If medical advice is needed, have product container or label at hand.
P102 Keep out of reach from children.
P103 Read label before use.

Prevention **P201** Obtain special instructions before use.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

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.
P308 + P313 IF exposed or concerned: Get medical attention.
P312 Call a POISON CENTRE or doctor if you feel unwell.
P337 + P313 If eye irritation persists: Get medical attention.

Storage **P405** Store locked up.

Disposal **P501** Dispose of contents/container in accordance with local / regional / national / international regulations.

Poisons Schedule: Schedule 5

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS Number	Proportion
Borax decahydrate	1303-96-4	<=100%

4. FIRST AID MEASURES

For advice, contact a Poisons Information Centre (e.g. phone Australia 131 126; New Zealand 0800 764 766) or a doctor at once.

Ingestion: IF SWALLOWED: Rinse mouth, then drink plenty of water. Call a Poison Centre or doctor/physician for advice if large amounts are swallowed (i.e. more than one teaspoon) or if you feel unwell.

Eye Contact: IF IN EYES: Immediately flush eyes with running water for several minutes, holding eyelids open and occasionally lifting the upper and lower lids. Remove contact lenses if present and easy to do. Continue rinsing for at least 15 minutes. If eye irritation persists, get medical advice/attention.

Skin Contact: IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs, get medical advice/attention.

SAFETY DATA SHEET

Inhalation: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If respiratory symptoms persist, get medical advice/attention.

Medical attention and special treatment: If exposed or concerned, get medical advice/attention. Treat symptomatically.

5. FIRE FIGHTING MEASURES

General Do not attempt to take action without suitable protective equipment. If safe to do so, move undamaged containers from fire area. Cool containers with water spray until well after fire is out.

Flammability Conditions Not combustible.

Suitable Extinguishing Media: If material is involved in a fire, use water spray, dry powder, foam. Any extinguishing media may be used on nearby fires.

Fire and Explosion Hazards Not flammable or explosive.

Hazardous combustion products: In case of fire, toxic fumes may be released. When heated, product loses water forming anhydrous borax which may produce hydrogen gas which could create an explosive hazard.

Precautions for fire fighters and special protective equipment: Contain runoff from fire control or dilution water – Runoff may cause pollution. Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing will only provide limited protection.

Auto Ignition temperature: No Data Available

Decomposition Temperature: No Data Available

Flammability: No Data Available

Flash Point: No Data Available

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Ensure adequate ventilation. Do not touch or walk through spilled material. Avoid generating dust. Avoid breathing dust and contact with eyes, skin, and clothing.

Protective equipment: Do not attempt to take action without suitable protective equipment (see SECTION 8).

Emergency procedures: Spill or leak area should be isolated immediately. Keep unauthorised personnel away.

Environmental Precautions: Avoid contamination of water bodies during clean up and disposal. Notify authorities if product enters sewers or public waters.

SAFETY DATA SHEET

Methods and materials for Containment and clean up: Stop leak if you can do it without risk. Prevent dust cloud. Prevent entry into waterways, sewers, basements, or confined areas. Mechanically recover the product. Vacuum, shovel, or sweep up and place in containers for disposal (see SECTION 13). Ventilate spillage area.

7. HANDLING AND STORAGE

This material must be stored, maintained and used in accordance with the relevant regulations.

Conditions for safe storage: Keep in the original container. Store in a cool, dry, and well-ventilated place, out of direct sunlight. Keep container tightly closed. Prevent any accidental damage to bags. Keep away from food/feedstuffs and incompatible materials (see SECTION 10). Store locked up.

Precautions for safe handling: Safety showers and eyewash facilities should be provided within the immediate work area for emergency use. Ensure adequate ventilation. Obtain special instructions before use – Do not handle until all safety precautions have been read and understood. Minimise dust generation and accumulation. Avoid breathing dust and contact with eyes, skin, and clothing. Do not ingest. Use personal protective equipment as required (see SECTION 8).

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure control measures: For Borates, tetra, sodium salts (Decahydrate):
Safe Work Australia Exposure Standard: TWA = 5 mg/m³
New Zealand Workplace Exposure Standard: TWA = 5 mg/m³

Biological Monitoring No information available

Engineering Controls A system of local and/or general exhaust is recommended to keep employee exposure as low as possible. Maintain air concentrations below occupational exposure standards.

Personal Protective Equipment

Eye and Face Wear appropriate eye protection to avoid eye contact. Recommended: Safety glasses. Goggles may be warranted if environment is excessively dusty.

Skin Wear protective gloves. Wear appropriate personal protective clothing to avoid skin contact.

Respiratory Wear respiratory protection in case of inadequate ventilation or prolonged exposure to dust. Recommended: Wear a dust mask/particulate mask respirator (refer to AS/NZS 1715 & 1716).

SAFETY DATA SHEET

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Solid
Colour:	White
Odour:	Odourless
pH:	9.2 (1% solution)
Solubility:	4.7% in water at 20°C – 65.6% in water at 100°C
Auto Ignition temperature:	No Data Available
Decomposition Temperature:	No Data Available
Evaporation Rate:	No Data Available
Flammability:	No Data Available
Flash Point:	No Data Available
Boiling Point:	1,575°C
Melting/Freezing Point:	741°C
Odour Threshold:	No Data Available
Partition coefficient: n-octanol/water	No Data Available
Relative Density:	No Data Available
Upper Flammability Limit	No Data Available
Lower Flammability Limit:	No Data Available
Explosive limits:	No Data Available
Vapour density:	No Data Available
Vapour pressure;	Negligible (at 20°C)
Viscosity:	No Data Available
Biopersistence:	No Data Available
Crystallinity:	No Data Available
Dustiness:	No Data Available
Particle size:	No Data Available
Redox potential:	No Data Available
Release of invisible flammable vapours and gases	No Data Available

SAFETY DATA SHEET

**Saturated Vapour
Concentration**

No Data Available

10. STABILITY AND REACTIVITY

Chemical stability:	Stable under normal conditions.
Conditions to avoid:	Avoid generating dust. Avoid contact with incompatible materials.
Incompatible materials:	Incompatible/reactive with strong reducing agents, such as metal hydrides, acetic anhydride, or alkali metals.
Hazardous decomposition products:	Under normal conditions of storage and use, hazardous decomposition products should not be produced. In case of fire, toxic fumes may be released. When heated, product loses water forming anhydrous borax which may produce hydrogen gas which could create an explosive hazard.
Hazardous reactions or Polymerisation:	No information available.

11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

Exposure Limits:	For Borates, tetra, sodium salts (Decahydrate): Safe Work Australia Exposure Standard: TWA = 5 mg/m ³ New Zealand Workplace Exposure Standard: TWA = 5 mg/m ³
Ingestion:	Products containing Borax decahydrate are not intended for ingestion. Small amounts swallowed accidentally are not likely to cause effects; swallowing amounts larger than a teaspoon may cause gastrointestinal symptoms such as nausea, vomiting, and diarrhoea.
Eye contact:	Causes serious eye irritation.
Skin contact:	Non-irritant. Borax decahydrate does not cause irritation to intact skin. Overexposure may lead to delayed effects such as skin redness and peeling.
Inhalation:	Disodium tetraborate, decahydrate has no respiratory or skin sensitisation. Occasional mild irritation effects to nose and throat may occur from inhalation of Borax decahydrate dust levels higher than 10 mg/m ³ .
Acute Toxicity:	Acute Toxicity (Oral): LD50, Rats: >2,500 mg/kg bw. (Disodium tetraborate, anhydrous). Acute Toxicity (Dermal): LD50, Rabbits: >2,000 mg/kg bw.

SAFETY DATA SHEET

Carcinogenity:	Disodium tetraborate, decahydrate is not carcinogenic.
Mutagenicity:	Disodium tetraborate, decahydrate is not mutagenic.
Reproductive	Suspected of damaging the unborn child.

12. ECOLOGICAL INFORMATION

Ecotoxicity	Aquatic Toxicity: LC50, Fish (Pimephales promelas (Fathead minnow)): 79.7 mg B/L or 703 mg Disodium Tetraborate, decahydrate/L (96 h). LC50, Invertebrate (Daphnia/Daphnids (Daphnia Magna)): 133 mg B/L or 1,173 mg Disodium Tetraborate, decahydrate/L (48 h). EC50, Algae (Pseudokirchneriella subcapitata (Green algae)), Biomass: 40 mg B/L or 353 mg Disodium tetraborate, decahydrate/L (72 h).
Persistence and degradability:	Boron is naturally occurring and ubiquitous in the environment. Boron occurs naturally in sea and water at an average concentration of 5 mg B/L and fresh water at 1 mg B/L or less. Disodium tetraborate, decahydrate decomposes in the environment to natural borate. In dilute aqueous solutions, the predominant boron species present is undissociated boric acid.
Bioaccumulative potential:	Not bioaccumulative.
Mobility:	The product is soluble in water and is leachable through normal soil.

13. DISPOSAL CONSIDERATIONS

Disposal methods:	Dispose of in accordance with all local, state and federal regulations. All empty packaging should be disposed of in accordance with Local, State, and Federal Regulations or recycled/reconditioned at an approved facility. Or refilled at Big Bubble in Midvale.
--------------------------	---

14. TRANSPORT INFORMATION

Road and Rail Transport

Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS

Marine Transport

Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; NON-DANGEROUS GOODS.

Air Transport

Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; NON-DANGEROUS GOODS.

SAFETY DATA SHEET

15. REGULATORY INFORMATION

Poisons Schedule: Schedule 5

16. OTHER INFORMATION

Revision date: 11/09/2024

Reason for issue: Update SDS

Key/Legend:

< Less Than

> Greater Than

AICS Australian Inventory of Chemical Substances

atm Atmosphere

CAS Chemical Abstracts Service (Registry Number)

cm² Square Centimetres

CO₂ Carbon Dioxide

COD Chemical Oxygen Demand

deg C (°C) Degrees Celcius

g Grams

g/cm³ Grams per Cubic Centimetre

g/l Grams per Litre

HSNO Hazardous Substance and New Organism

IDLH Immediately Dangerous to Life and Health

immiscible Liquids are insoluble in each other.

inHg Inch of Mercury

inH₂O Inch of Water

K Kelvin

kg Kilogram

kg/m³ Kilograms per Cubic Metre

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.

ltr 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

mmH₂O Millimetres of Water

mPa.s Millipascals per Second

N/A Not Applicable

NIOSH National Institute for Occupational Safety and Health

NOHSC National Occupational Health and Safety Commission

SAFETY DATA SHEET

OECD Organisation for Economic Co-operation and Development

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, the Tonne

TWA Time Weighted Average

ug/24H Micrograms per 24 Hours

UN United Nations

wt Weight

This material safety data sheet has been prepared by Midland Chemicals

This MSDS 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. No liability is accepted whether direct or indirect from its application since the conditions of final use are outside Midland Chemicals control. The end user is obliged to conform to relevant government regulations and/or patent laws applicable in their respective States of Countries.