



SALES & SERVICES

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Safety Data Sheet

1. IDENTIFICATION OF THE PRODUCT AND THE SUPPLIER

1.1 Product identifiers

Product name : SODIUM BICARBONATE

1.2 Other means of identification

Sodium hydrogen carbonate; Baking soda; Bicarbonate of soda; Sodium acid carbonate

1.3 Recommended use of the product and restrictions on use

Wide variety of industrial, chemical and food related applications.

Details of supplier of the safety data sheet

Company : AGent Sales & Services Pty Ltd

Street address : 38 May Holman Drive, Bassendean, Western Australia 6054

Telephone : (+61 8) 6270 4500

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1.4 Emergency telephone number

Telephone : 1300 883 844

2. HAZARDS IDENTIFICATION

2.1 GHS Classification

NOT hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS)

GHS Label elements, including precautionary statements

None

Signal word : None

Hazard statement(s) : None

2.2 Other hazards

None.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS Number	Classification	Concentration (%)
Sodium bicarbonate	144-55-8	-	> 99

For the full text of the H-Statements mentioned in this section, see Section 16

4. FIRST AID MEASURES

4.1 Description of First Aid measures

General advice

Contact the Poisons Information Centre (Phone: Australia 131 126; New Zealand 0800 764 766) or consult a doctor/physician. Show this safety data sheet to the doctor in attendance.

If inhaled

Remove victim from exposure to fresh air. If not breathing, apply artificial respiration. If breathing is difficult, give oxygen. If symptoms persist, call a physician.

In case of skin contact

Remove contaminated clothing and shoes. Wash affected area with soap and plenty of water. If irritation persists, seek medical attention.

In case of eye contact

Immediately flush eyes with plenty of water holding eyelids open, also under the eyelids. If irritation persists, seek medical attention.

If swallowed

Rinse mouth with water. Give water to drink. Do NOT induce vomiting. If symptoms persist, seek medical attention.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in Section 2.2 and/or Section 11.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

4.4 First Aid facilities

Eye wash facilities and safety shower should be available.

5. FIRE FIGHTING MEASURES**5.1 Suitable extinguishing media**

Non-flammable solid; however, if material is involved in a fire, use extinguishing media appropriate to surrounding fire conditions.

5.2 Special hazards arising from the chemical

Non-combustible solid. Decomposes on heating to emit toxic fumes, including oxides of carbon and oxides of sodium.

5.3 Special protective equipment and precautions for fire fighters

Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to products of decomposition.

5.4 Hazchem code

Not applicable

6. ACCIDENTAL RELEASE MEASURES**6.1 Personal precautions, protective equipment and emergency procedures**

Wear protective equipment to prevent skin and eye contact. Avoid breathing in dust. For personal protection see Section 8.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Prevent any mixture with an acid into the sewer/drain (gas formation). If contamination of sewers or waterways has occurred, advise local emergency services. Observe all local and national regulations.

6.3 Methods and materials for containment and cleaning up

Slippery when spilt. Avoid accidents, clean up immediately. Eliminate all sources of ignition. Increase ventilation. Contain and sweep/shovel up spills with dust binding material or use an industrial vacuum cleaner. Avoid generating dust. Transfer to a suitable, labelled container and dispose of promptly

7. HANDLING AND STORAGE**7.1 Precautions for safe handling**

Ensure an eye bath and safety shower are available and ready for use. Observe good personal hygiene practices and recommended procedures. Wash thoroughly after handling. Take precautionary measures against static discharges by bonding and grounding equipment. Avoid contact with eyes, skin and clothing. Do not inhale product dust/fumes.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well-ventilated area. Keep containers tightly closed when not in use. Inspect regularly for deficiencies such as damage or leaks. Protect against physical damage. Store away from incompatible materials as listed in Section 10.

This material is not classified as a Dangerous Goods by the criteria of the ADG.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

8.1 Control parameters - Occupational Exposure Limits

No exposure standard has been established for this product by the Australian Safety and Compensation Council (ASCC). However, the exposure standard for dust not otherwise specified :

Chemical Name	Reference	TWA – Peak Limitation		STEL		Carcinogen Category	Notices
		ppm	mg/m ³	ppm	mg/m ³		
Inspirable dust	ASCC		10			-	-
Respirable dust	ASCC		3				

As published in "Workplace Exposure Standards for Airborne Contaminants, December 2011" by SWA.

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.

Biological Limits

None allocated for this product.

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Ensure ventilation is adequate to maintain air concentrations below Exposure Standards. 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

Personal protective equipment (PPE)

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.

Eye/face protection

Safety glasses with side shields or safety goggles (AS/NZS 1336 & 1337).

Skin protection

Wear protective gloves (rubber or PVC), long-sleeved protective clothing and safety footwear appropriate for the risk of exposure (AS 2161 and AS3765/2210). Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use. Wash and dry hands.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate, use a P1 or P2 particulate respirator when handling this product (AS/NZS 1715 & 1716).

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Form : Solid, crystalline powder Colour : White
Odour:	Odourless
Odour Threshold:	No data available
pH:	8.3
Melting Point:	300°C
Boiling Point/Range:	No data available
Decomposition Temperature:	Starts at about 70°C
Evaporation Rate:	No data available
Flash Point:	Not applicable
Flammability Limits:	Not applicable

Relative Density:	2.160 g/cm ³
Vapour Density (air=1):	No data available
Vapour Pressure:	No data available
% Volatiles:	No data available
Solubility in water:	93 g/L @ 20°C

10. STABILITY AND REACTIVITY

10.1 Reactivity

No data available.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Hazardous polymerisation will not occur.

10.4 Conditions to avoid

Exposure to moisture. Avoid temperatures exceeding 50°C

10.5 Incompatible materials

Strong acids, strong oxidising agents.

10.6 Hazardous decomposition products

Oxides of carbon. Oxides of sodium.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

Main symptoms of prolonged or excessive exposure include; sweating, superficial burning sensation, vomiting, nausea, shortness of breath.

LD₅₀ Oral, rat is 4,220 mg/kg

LC₅₀ Inhalation, rat is > 4.74 mg/L

Skin corrosion/irritation

Skin - Human

Result: Mild skin irritation - 3 d

Serious eye damage/eye irritation

Eyes - Rabbit

Result: Mild eye irritation - 30 s

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

No data available.

Specific target organ toxicity (STOT) - single exposure

No data available.

Specific target organ toxicity (STOT) - repeated exposure

No data available

Aspiration hazard

No data available

Health Effects

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:

- Eye contact :** Dust contact with the eyes can lead to mechanical irritation.
- Skin contact :** Repeated or prolonged exposure: contact with dust can cause mechanical irritation or drying of the skin.
- Ingestion :** May cause gastrointestinal irritation, nausea, vomiting and diarrhoea.
- Inhalation :** In case of higher concentration: slight irritation.

11.2 Information on possible routes of exposure

The substance can be absorbed into the body by inhalation of its dust, ingestion, skin and/or eye contact.

11.3 Additional Information

RTECS: VZ0950000

12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity

Avoid contaminating waterways.

Toxicity to fish:

- Fishes, *Oncorhynchus mykiss*, LC₅₀: 7700 mg/L/96 h
- Fishes, *Oncorhynchus mykiss*, NOEC: 2300 mg/L/96 h
- Crustaceans, *Daphnia magna*, EC₅₀: 4100 mg/L/48 h
- Crustaceans, *Daphnia magna*, NOEC: 3100 mg/L/48 h

Chronic Toxicity

Crustaceans, *Daphnia magna*, NOEC: > 576 mg/L/21 d

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulative potential

No data available.

12.4 Mobility in soil

No data available.

12.5 Other adverse effects

No data available.

13. DISPOSAL CONSIDERATIONS

13.1 Disposal methods and containers

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.

13.3 Special precautions for landfill or incineration

Contact a specialist disposal company or the local waste regulator for advice.

14. TRANSPORT INFORMATION

Not classified as a Dangerous Goods by the criteria of the ADG Code for transport by road or rail

Not classified as a Dangerous Goods by the criteria of the IMDG Code for transport by sea

Not classified as a Dangerous Goods by the criteria of the IATA Code for transport by air

14.1 UN number

ADG : Not assigned **IMDG :** Not assigned **IATA :** Not assigned

14.2 Proper shipping name

ADG : SODIUM BICARBONATE
IMDG : SODIUM BICARBONATE
IATA : SODIUM BICARBONATE

14.3 Transport hazard class

ADG : Not assigned **IMDG :** Not assigned **IATA :** Not assigned

14.4 Packing group

ADG : Not assigned **IMDG :** Not assigned **IATA :** Not assigned

14.5 Environmental hazards

ADG : No **IMDG Marine Pollutant :** No **IATA :** No

- 14.6 Special precautions for users** No data
- 14.7 Hazchem code**
ADG : Not assigned **IMDG EMS** : Not assigned
- 14.8 Dangerous goods initial emergency response guide (SAA/SNZ HB76:2010)** Not assigned

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations

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

Not listed

Carcinogen classification under WHS Regulations 2011, Schedule 10

Not listed

Notification status

AICS On the inventory, or in compliance with the inventory.

16. OTHER INFORMATION

Key / legend to abbreviations and acronyms used in the MSDS

ADG	Australian Dangerous Goods
ASCC	Australian Safety and Compensation Council
DEC	Department of Environment and Conservation
GHS	Globally Harmonised System of Classification & Labelling of Chemicals
NOHSC	National Occupational Health and Safety Commission
RTECS	Registry of Toxic Effects of Chemical Substances.
SUSDP	Standard for the Uniform Scheduling of Drugs and Poisons
TWA	Time weighted average
STEL	Short term exposure level
SWA	Safe Work Australia
Peak Limitations	A ceiling concentration that should not be exceeded over a measurement period, which should be as short as possible, but not exceeding 15 minutes
EC ₅₀	Effective Concentration. The effective concentration of substance that causes 50% of the maximum response.
LC ₅₀	Lethal Concentration. LC ₅₀ 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.
LD ₅₀	Lethal Dose. LD ₅₀ is the single dose of a substance that causes the death of 50% of an animal population from exposure to the substance by any route other than inhalation
TD Lo	The lowest dose of a substance known to have produced signs of toxicity
RTECS	Registry of Toxic Effects of Chemical Substances
g/L	Grams per litre
g/cm ³	Grams per cubic centimetre
mg/m ³	Milligrams per cubic metre
mg/kg	Milligrams per kilogram
NOEC	No Observed Effect Concentration. The test concentration immediately below the lowest tested concentration with statistically significant adverse effect. The NOEC has no statistically significant adverse effect compared to the control.
pH	Relates to hydrogen ion concentration - this value will relate to a scale of 0 - 14, where 0 is highly acidic and 14 is highly alkaline
WHS	Work Health and Safety

Literature references

"Workplace Exposure Standards for Airborne Contaminants, December 2011" by SWA Work Health and Safety Regulations 2011

"Registry of Toxic Effects of Chemical Substances". Ed. D. Sweet, US Dept. of Health & Human Services: Cincinnati, 2012.

Reason(s) for Issue:

Revised primary SDS

Alignment to GHS requirements

Disclaimer

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