

#### **Sodium Bicarbonate**

Safety Data Sheet Revision 5, Date 11/08/2022

### 1. IDENTIFICATION

Commercial Name: Sodium Bicarbonate

Other Names: Baking soda; Bicarbonate of soda; Sodium hydrogen carbonate

**Product Use:** Food/feed applications; Industrial use.

#### Contact Information:

Organisation	Location	Telephone	Ask For
Adelaide Moulding	7 Woodlands Terrace Edwardstown	08 8294 0451	SDS Officer
and Candle Supplies	South Australia 5039		
Poisons Information		13 11 26	
Centre			

#### 2. HAZARD IDENTIFICATION

Poison Schedule: Not scheduled

**Globally Harmonised System:** 

Hazard Classification: NOT hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling

of Chemicals (GHS).

Signal Words: None

**National Transport** 

Commission Australia: Australia 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)

Safe Work Australia: National Guide for Classifying Hazardous Chemicals under the Model WHS Regulations

Hazard Classification: NOT hazardous according to the criteria of Safe Work Australia under Model WHS Regulations

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Mixtures:

CAS Number	Chemical Entity	Formula	Proportion
144-55-8	Sodium bicarbonate	NaHCO3	<=100 %

### 4. FIRST AID MEASURES

**Swallowed:** IF SWALLOWED: Rinse mouth, then drink plenty of water. Do not induce vomiting. Get medical

advice/attention if a large amount is swallowed or if you feel unwell. Never give anything by mouth

to an unconscious person.

**Skin:** IF ON SKIN: Remove contaminated clothing and shoes. Flush skin with running water for

several minutes. If skin irritation occurs, get medical advice/attention. Wash contaminated

clothing and shoes before reuse.

Eye: 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 10-15 minutes. If eye irritation persists, get medical

advice/attention.

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. Apply resuscitation if

victim is not breathing; Administer oxygen if breathing is difficult.

ABN: 85 765 232 986

Advice to Doctor: Treat symptomatically. When symptoms persist or in all cases of doubt, seek medical advice.

**Medical Conditions** 

Aggravated by Exposure: No information available.

#### 5. FIRE FIGHTING MEASURES

General Measures: If safe to do so, move undamaged containers from fire area. Cool containers with water spray until

well after fire is out.

Flammability Conditions: Non-combustible.

\*This product will not burn, and can be used as a dry powder extinguishing medium.

**Extinguishing Media:** If material is involved in a fire, use extinguishing media that are appropriate to local circumstances

and the surrounding environment.

Fire and Explosion Hazard: Decomposes on heating, emitting toxic fumes.

**Hazardous Products** 

Fire or heat may produce irritating and/or toxic fumes, including oxides of Carbon, oxides of Sodium. of Combustion:

**Special Fire Fighting** 

Instructions:

Contain runoff from fire control or dilution water - Runoff may pollute waterways.

**Personal Protective** 

**Equipment:** Wear self-contained breathing apparatus (SCBA) in combination with normal firefighting clothing (full

fire kit).

Flash Point: No Data Available

Lower Explosion: No Data Available

**Upper Explosion:** No Data Available

**Auto Ignition Temperature:** No Data Available

Hazchem Code: No Data Available

### 6. ACCIDENTAL RELEASE MEASURES

**General Response Procedure:** Ensure adequate ventilation. Do not touch or walk-through spilled material - slipping hazard. Avoid

dust formation. Avoid breathing dust and contact with eyes, skin, and clothing.

Clean Up Procedures: Pick up and transfer to properly labelled containers for disposal (see SECTION 13).

\*Do not flush into surface water or sanitary sewer system. Prevent any mixture with an acid into the

sewer/drain (gas formation).

Containment: Stop leak if you can do it without risk. Prevent entry into waterways, sewers, basements or confined

areas. Cover powder spill with plastic sheet or tarp to minimise spreading.

**Decontamination:** Ventilate area.

**Environmental Precautionary** 

Measures:

Prevent entry into drains and waterways.

**Evacuation Criteria:** Spill or leak area should be isolated immediately. Keep unauthorised personnel away.

**Personal Precautionary** 

Measures: Use personal protective equipment as required (see SECTION 8).

## 7. HANDLING AND STORAGE

Handling: Safety showers and eyewash facilities should be provided within the immediate work area for

emergency use. Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Avoid dust formation. Avoid breathing dust and contact with eyes, skin, and clothing. Do not ingest. Use personal protective equipment as required (see SECTION 8). To avoid thermal

decomposition, do not overheat.

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Storage: Store in a cool, dry, and well-ventilated place, out of direct sunlight. Keep containers tightly closed

when not in use. Protect from moisture. Keep away from incompatible materials (see SECTION 10).

Other Information: Keep in the original, properly labelled container.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**General:** No specific exposure standards are available for this product. For dusts from solid

substances without specific occupational exposure standards:

- Safe Work Australia Exposure Standard (Nuisance dusts): 8 hr TWA = 10 mg/m3 (measured as

inhalable dust).

- New Zealand WES (Particulates not otherwise classified): TWA = 10 mg/m3; TWA = 3 mg/m3

(respirable dust).

Exposure Limits: No Data Available

Biological Limits: No information available.

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.

**Personal Protection Equipment** 

**Respiratory protection:** Respiratory protection: Wear respiratory protection in case of inadequate ventilation or if an

inhalation risk exists.

Recommended: Dust mask/particulate filter respirator (refer to AS/NZS 1715 & 1716).

Eye/face protection: Wear appropriate eye protection to avoid eye contact.

Recommended: Safety glasses or goggles. Hand protection: Handle with gloves. Recommended: Impervious gloves.

Skin/body protection: Wear appropriate personal protective clothing to avoid skin contact.

**Recommended**: Dust impervious protective suit.

Special Hazards Precautions: No information available.

Work Hygienic Practices: Do not eat, drink or smoke when using this product. Wash thoroughly after handling, before breaks

and at the end of workday. Take off contaminated clothing and wash it before reuse. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Solid

Appearance: Crystalline powder or granules

Odour: Odourless
Colour: White

pH: 8.0 - 8.5 (1% solution)
Vapour Pressure: No Data Available
Relative Vapour Density: No Data Available
Boiling Point: Decomposes
Melting Point: Decomposes
Freezing Point: No Data Available

**Solubility:** Soluble in water - Insoluble in alcohol

Specific Gravity:2.16 (H2O = 1)Flash Point:No Data AvailableAuto Ignition Temp:No Data AvailableEvaporation Rate:No Data AvailableBulk Density:0.5 - 1.3 kg/dm3Corrosion Rate:No Data Available

**Decomposition Temperature:** >50 °C

Density:No Data AvailableSpecific Heat:No Data AvailableMolecular Weight:84.01 g/molNet Propellant Weight:No Data AvailableOctanol Water Coefficient:No Data Available

Adelaide Moulding and Candle Supplies

7 Woodlands Terrace Edwardstown SA 5039 Page 3 of 7 Phone: +61 8 8294 0451 Email: admin@amcsupplies.com.au Web: www.amcsupplies.com.au ABN: 85 765 232 986 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 information available. No information available.

Potential for Dust Explosion: Fast or Intensely Burning

Characteristics: No information available.

Flame Propagation or

Burning Rate of Solid Materials: No information available.

Non-Flammables That Could Contribute Unusual Hazards

to a Fire: No information available.

**Properties That May Initiate or** 

Contribute to Fire Intensity: Non-combustible.

\*This product will not burn, and can be used as a dry powder extinguishing medium.

**Reactions That Release** 

Gases or Vapours: Decomposes on heating, emitting toxic fumes, including oxides of Carbon, oxides of Sodium.

Release of Invisible Flammable Vapours and

Gases: No information available.

#### 10. STABILITY AND REACTIVITY

**General Information:** Hazardous reactions will not occur under normal circumstances.

Chemical Stability: Stable under recommended storage conditions.

**Conditions to Avoid:** Avoid dust formation. Protect from moisture. To avoid thermal decomposition, do not overheat.

Materials to Avoid: Incompatible/reactive with acids, Aluminium (tarnishes).

**Hazardous Decomposition** 

**Products:** Decomposes on heating, emitting toxic fumes, including oxides of Carbon, oxides of Sodium.

\*In moist air, forms sodium carbonate, which is an irritant.

Hazardous Polymerisation: Hazardous polymerisation will not occur.

### 11. TOXICOLOGICAL INFORMATION

**General Information:** Information on possible routes of exposure:

Ingestion: May cause nausea, vomiting and abdominal pain. Large doses may produce symptomatic

alkalosis and expansion in extracellular fluid volume with edema. Eye contact: Contact may cause irritation due to mechanical abrasion.

Skin contact: Large amounts of dust may cause mechanical irritation or drying of the skin.

Inhalation: Prolonged inhalation of dust may cause respiratory irritation.

Chronic effects: Sodium Bicarbonate is not listed as a carcinogen by the Environmental Protection Agency (EPA), the State of California, the National Toxicology Program, or the International Agency

for Research on Cancer.

Acute:

**Ingestion:** Acute toxicity (Oral):

- LD50, Rat: 4,220 mg/kg

Carcinogen Category: None

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity:** Aquatic toxicity:

- Acute LC50, Fish (Oncorhynchus mykiss): 7,100 mg/l (96 h) [flow-through test].

- EC50, Crustacea (Daphnia magna): 4,100 mg/l (48 h) [flow-through test].

- NOEC, Crustacea (Daphnia magna): >576 mg/l (21 d) [semi-static test; OECD Test Guideline 211].

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\*Not harmful to aquatic life (LC/LL50, EC/EL50 >100 mg/L)

Persistence/Degradability: Product dissociates rapidly to corresponding ions on contact with water.

Mobility: High mobility (water, soil/sediments).

**Environmental Fate**: Prevent entry into drains and water ways.

**Bioaccumulation Potential**: Does not bioaccumulate.

**Environmental Impact**: No Data Available

## 13. DISPOSAL CONSIDERATIONS

**General Information** Where possible recycling is preferred to disposal or incineration. If recycling is not practicable,

dispose of via a licensed disposal company and in accordance with local/regional/national

regulations.

Special Precautions for Land Fill: No information available.

### 14. TRANSPORT INFORMATION

Land Transport (Australia)

**ADG Code** 

Proper Shipping Name: Sodium bicarbonate
Class: No Data Available
Subsidiary Risk(s): 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.

Sea Transport IMDG Code

**Proper Shipping Name:** Sodium bicarbonate Class: No Data Available Subsidiary Risk(s): No Data Available **UN Number:** No Data Available Hazchem: No Data Available Pack Group: No Data Available **Special Provision:** No Data Available EMS: No Data Available

Marine Pollutant: No

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

Air Transport IATA DGR

Proper Shipping Name: Sodium bicarbonate
Class: No Data Available
Subsidiary Risk(s): 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 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)

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#### 15. REGULATORY INFORMATION

General Information: No Data Available
Poisons Schedule (Aust): Not Scheduled
Inventory Status: Australia (AICS)

National/Regional Inventories

Australia (AIIC): Listed Canada (DSL): Listed

Canada (NDSL): Not Determined

China (IECSC): Listed

Europe (EINECS): 205-633-8

Europe (REACh): Not Determined

Japan (ENCS/METI): Not Determined

Korea (KECI): Listed

Malaysia (EHS Register): Not Determined

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:** 

SOBICA0300, SOBICA0400, SOBICA0500, SOBICA0600, SOBICA0700, SOBICA0800, SOBICA0900, SOBICA1000, SOBICA1001, SOBICA1002, SOBICA1003, SOBICA1004, SOBICA1005, SOBICA1006, SOBICA1007, SOBICA1008, SOBICA1009, SOBICA1010, SOBICA1011, SOBICA1012, SOBICA1013, SOBICA1014, SOBICA1015, SOBICA1016, SOBICA1100, SOBICA1200, SOBICA1300, SOBICA1400, SOBICA1500, SOBICA1501, SOBICA1502, SOBICA1503, SOBICA1504, SOBICA1550, SOBICA1600, SOBICA1700, SOBICA1717, SOBICA1800, SOBICA1801, SOBICA1802, SOBICA1803, SOBICA1804, SOBICA1805, SOBICA1806, SOBICA1807, SOBICA1808, SOBICA1809, SOBICA1810, SOBICA1811, SOBICA1812, SOBICA1813, SOBICA1814, SOBICA1900, SOBICA1901, SOBICA2000, SOBICA2001, SOBICA2002, SOBICA2003, SOBICA2004, SOBICA2050, SOBICA2051, SOBICA2054, SOBICA2055, SOBICA2056, SOBICA2057, SOBICA2058, SOBICA2060, SOBICA2061, SOBICA2062, SOBICA2065, SOBICA2066, SOBICA2067, SOBICA2070, SOBICA2080, SOBICA2100, SOBICA2101, SOBICA2200, SOBICA2300, SOBICA2400, SOBICA2500, SOBICA2600, SOBICA2650, SOBICA2700, SOBICA2800, SOBICA2900, SOBICA3000, SOBICA3001, SOBICA3002, SOBICA3030, SOBICA3040, SOBICA3045, SOBICA3050, SOBICA3070, SOBICA3071, SOBICA3075, SOBICA3076, SOBICA3080, SOBICA3100, SOBICA3101, SOBICA3200, SOBICA3201, SOBICA3300, SOBICA3400, SOBICA3401, SOBICA3450, SOBICA3500, SOBICA3501, SOBICA3502, SOBICA3510, SOBICA3513, SOBICA3520, SOBICA3530, SOBICA3535, SOBICA3550, SOBICA3555, SOBICA3600, SOBICA3700, SOBICA3800, SOBICA3900, SOBICA4000, SOBICA4001, SOBICA4002, SOBICA4003, SOBICA4004, SOBICA4005, SOBICA4006, SOBICA4010, SOBICA4100, SOBICA4200, SOBICA4300, SOBICA4301, SOBICA4400, SOBICA4401, SOBICA4500, SOBICA4501, SOBICA4600, SOBICA4601, SOBICA4602, SOBICA4603, SOBICA4700, SOBICA4800, SOBICA4850, SOBICA4900, SOBICA5000, SOBICA5100, SOBICA5200, SOBICA5400, SOBICA5410, SOBICA5420, SOBICA5450, SOBICA5555, SOBICA5600, SOBICA5700, SOBICA5800, SOBICA5801, SOBICA5900, SOBICA5901, SOBICA6000, SOBICA6001, SOBICA6002, SOBICA6003, SOBICA6100, SOBICA6101, SOBICA6200, SOBICA6201, SOBICA6202, SOBICA6203, SOBICA6204, SOBICA6205, SOBICA6206, SOBICA6207, SOBICA6208, SOBICA6209, SOBICA6210, SOBICA6211, SOBICA6212, SOBICA6213, SOBICA6214, SOBICA6215, SOBICA6216, SOBICA6217, SOBICA6218, SOBICA6219, SOBICA6220, SOBICA6221, SOBICA6222, SOBICA6223, SOBICA6224, SOBICA6225, SOBICA6226, SOBICA6227, SOBICA6228, SOBICA6229, SOBICA6230, SOBICA6231, SOBICA6232, SOBICA6233, SOBICA6234, SOBICA6235, SOBICA6236, SOBICA6237, SOBICA6300, SOBICA6400, SOBICA6430, SOBICA6500, SOBICA6600, SOBICA6700, SOBICA6701, SOBICA6800, SOBICA6900, SOBICA6901, SOBICA6950, SOBICA7000, SOBICA7100, SOBICA7200, SOBICA7300, SOBICA7410, SOBICA7415, SOBICA7420, SOBICA7421, SOBICA7422, SOBICA7423, SOBICA7424, SOBICA7425, SOBICA7426, SOBICA7430, SOBICA7431, SOBICA7435, SOBICA7436, SOBICA7438, SOBICA7439, SOBICA7440, SOBICA7441, SOBICA7445, SOBICA7450, SOBICA7451, SOBICA7452, SOBICA7453, SOBICA7454, SOBICA7455, SOBICA7460, SOBICA7465, SOBICA7470, SOBICA7480, SOBICA7481,

Phone: +61 8 8294 0451

ABN: 85 765 232 986

Email: admin@amcsupplies.com.au

Web: www.amcsupplies.com.au

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Revision: 5

Revision Date: 11 Aug 2022

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
EPA (New Zealand)	Environmental Protection Authority of New Zealand
deg F (°F)	Degrees Farenheit
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
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.
ltr or L	Litre
m³	Cubic Metre
mbar	Millibar
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 Heath and Safety Commission
OECD	Organisation for Economic Co-operation and Development
Oz	Ounce
PEL	Permissible Exposure Limit
Pa	Pascal
ppb	Parts per Billion

Email: admin@amcsupplies.com.au

Web: www.amcsupplies.com.au

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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

#### **Further Information**

The information in this safety data sheet is to the best of our knowledge true and accurate at the date of publication. All data, instructions, and recommendations and/or suggestion are made without guarantee.

In all cases, it is the responsibility of the users to determine the applicability of such information and recommendations, and the suitability of any products for their own particular purpose. Accordingly, Adelaide Moulding and Candle Supplies assumes no liability whatsoever for the use of or reliance upon this information or for any damage resulting from handling or from contact with the product.

The Material Safety Data Sheet is intended to provide information for a health and safety assessment of the material. This document is not intended for quality assurance purposes.