



PRICE CHEMICALS PTY LIMITED

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MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION

Revision Date JULY 2011

Product Name SODIUM BICARBONATE

Other Names CARBONIC ACID MONOSODIUM SALT; SODIUM HYDROGEN CARBONATE; SODIUM HYDROEGNCARBONATE;

Uses Glass industry, detergent, environmental protection, chemical industry, purifying flue gas, water treatment, foaming agents.

Contact Information

Organisation	Location	Telephone	Ask For
Price Chemicals Pty Ltd Pty Ltd	10 Pile Rd Somersby NSW 2250 Australia	+61 2 43400088	Technical Officer
Poison Information Centre	Westmead NSW Australia	131126	
Chemcall 24 Hour Emergency Number	Australia New Zealand	1800-127406 0800-243622	
National Poisons Centre	New Zealand	0800-764766	

2. HAZARD IDENTIFICATION

NOT Hazardous according to criteria of NOHSC/ASCC.

Risk Phrases No data available.

Safety Phrases

ERMA New Zealand Approval Code

HSNO Hazard Classification No data available.

This Material Safety Data Sheet may not provide exhaustive guidance for all HSNO Controls assigned to this substance. The ERMA Web Site should be consulted for a full list of triggered controls and cited regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Chemical Entity	CAS Number	Proportions (%)
SODIUM BICARBONATE	[144-55-8]	>99.30

4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure.

Swallowed Rinse mouth with water. Give water to drink. Do NOT induce vomiting. If large amounts have been swallowed, seek medical attention.

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

Skin Remove contaminated clothing. Flush affected area with plenty of water. If irritation persists, seek medical attention.

Inhaled Remove victim from exposure to fresh air. If not breathing, apply artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if breathing problems occur.

Advice to Doctor Treat symptomatically based on judgement of doctor and individual reactions of patient.

Aggravated medical conditions caused by exposure No information available on medical conditions which are aggravated from exposure to this product.

5. FIRE FIGHTING MEASURES

Extinguishing Media In case of fire, use appropriate extinguishing media most suitable for surrounding fire conditions.

Hazards from Combustion Products Non-combustible solid. Incompatible with acids and sources of ignition. Hazardous decomposition products are unknown.

Special Protective Precautions and Equipment for Fire Fighters Fire fighters should wear a positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots and gloves). Clear fire area of all non-emergency personnel. Stay upwind. Keep out of low areas. Eliminate ignition sources. Move fire exposed containers from fire area if it can be done without risk. Do NOT allow fire fighting water to reach waterways, drains or sewers. Store fire fighting water for treatment.

Flammability Conditions Product is a non-flammable solid.

Additional Information

Hazchem Code N/A

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures Avoid accidents, clean up immediately. Slippery when spilt. Personnel involved in the clean up should wear full protective clothing as listed in section 8. Evacuate all unnecessary personnel. Eliminate all sources of ignition. Increase ventilation. Avoid generating dust. Stop leak if safe to do so. Isolate the danger area. Do NOT let product reach drains or waterways. If product does enter a waterway, advise the Environmental Protection Authority or your local Waste Management.

Methods and Materials for Containment and Clean Up Contain and sweep/shovel up spills with dust binding material or use an industrial vacuum cleaner. Transfer to a suitable, labelled waste container and dispose of promptly. Once pick up is complete, flush spill site with plenty of water to eliminate any residue preventing run-off from entering drains.

7. HANDLING AND STORAGE

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.

Conditions for Safe Storage (Including Any Incompatibles) 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 product is not classified dangerous for transport according to The Australian Code for the Transport of Dangerous Goods By Road and Rail.

Container Type Store in original packaging as approved by manufacturer. Exterior woven PP+interior laminated Kraft

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

National Exposure Standards 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 is 10mg/m³ (for inspirable dust) and 3mg/m³ (for respirable dust).

Biological Limit Values No information available on biological limit values for this product.

Engineering Controls 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 RESPIRATOR: Wear a P1 particulate respirator when handling this product (AS1715/1716). EYES: Safety glasses with side shields (AS1336/1337). HANDS: Wear rubber or PVC gloves (AS2161). CLOTHING: Long-sleeved protective clothing and safety footwear (AS3765/2210).

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance White Crystalline Powder

Formula NaHCO₃

Odour Odourless

Vapour Pressure Not applicable.

Vapour Density Not applicable.

Boiling Point Not applicable.

Melting Point N/A - Decomposition deg C

Solubility in Water 96g/L (20°C)

Specific Gravity 2.22 (Water = 1)

Flash Point Not applicable.

pH 8.5 (52g/L)

Lower Explosion Limit Not applicable.

Upper Explosion Limit Not applicable.

Ignition Temperature Not applicable.

Specific Heat Value Not applicable.

Particle Size Not applicable.

Volatile Organic Compounds (VOC) Content Not applicable.

Evaporation Rate Not applicable.

Viscosity 1.2mPa.s

Percent Volatile Not applicable.

Octanol/Water partition coefficient Not applicable.

Saturated Vapour Concentration Not applicable.

Additional Characteristics Not applicable.

Flame Propagation/Burning Rate of Solid Materials Not applicable.

Properties of Materials That May Initiate or Contribute to Fire Intensity Not applicable.

Potential for Dust Explosion Not applicable.

Reactions that Release Flammable Gases Not applicable.

Fast of Intensely Burning Characteristics Not applicable.

Non-flammables That Could Contribute Unusual Hazards to a Fire Not applicable.

Release of Invisible Flammable Vapours and Gases Not applicable.

Decomposition Temperature >60'C

Additional Information Solubility: Slightly soluble in alcohol. Molecular Weight: 84.02g/mol
Bulk Density: 0.5-1.2Kg/dm³

10. STABILITY AND REACTIVITY

Chemical Stability Product is stable under normal conditions of use, storage and temperature.

Conditions to Avoid Avoid excessive heat, generating dust, direct sunlight, moisture and high temperatures.

Incompatible Materials Incompatible with acids and sources of ignition.

Hazardous Decomposition Products Hazardous decomposition products are unknown.

Hazardous Reactions Hazardous polymerization has not been reported.

11. TOXICOLOGICAL INFORMATION

Toxicity Data Oral LD50 Rat : >4000mg/Kg Inhalation LC50 Rat : >4.74mg/L Skin Irritation Rabbit : Mild skin irritation Eye Irritation Rabbit : Mild eye irritation Genetic Toxicity In Vitro: Tests on bacterial or mammalian cell cultures did not show mutagenic effects. Teratogenicity : Oral route (gavage), 10 days, Various Species, 330mg/Kg, Did not show teratogenic effects in animal experiments. Possible Hazards : Health injuries are not known or expected under normal use.

Health Effects – Acute

Swallowed Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

Eye Mechanical irritation from the particulates generated by the product.

Skin Mechanical irritation from the particulates generated by the product. **Inhaled** Mechanical irritation from the particulates generated by the product.

12. ECOLOGICAL INFORMATION

Ecotoxicity Fishes, *Oncorhynchus mykiss*, LC50/96hr : 7700mg/L Fishes, *Oncorhynchus mykiss*, NOEC/96hr : 2300mg/L Fishes, *Lepomis macrochirus*, LC50/96hr : 7100mg/L Fishes, *Lepomis macrochirus*, NOEC/96hr : 5200mg/L Crustaceans, *Daphnia magna*, EC50/48hr : 4100mg/L Crustaceans, *Daphnia magna*, NOEC/48hr : 3100mg/L

Persistence and Degradability ABIOTIC DEGRADATION: - Water, hydrolyses Result: acid/base equilibrium as a function of pH Degradation Products: Carbonic acid/bicarbonate/carbonate BIODEGRADATION: - Remarks: The methods for determining the biological degradability are not applicable to inorganic substances.

Mobility No information available on mobility for this product.

Environmental Fate (Exposure) Do NOT let product reach waterways, drains and sewers. RESULTS OF PBT ASSESSMENT: - Sodium Bicarbonate is not considered a PBT substance.

Bioaccumulative Potential No information available on bioaccumulation for this product.

13. DISPOSAL CONSIDERATIONS

Disposal 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. Packaging must be incinerated in a suitable incineration plant holding a permit delivered by the competent authorities.

Special Precautions for Land Fill or Incineration Contact a specialist disposal company or the local waste regulator for advice. If recycling is not practicable, dispose of in accordance with local regulations, or, dilute with plenty of water. Neutralise with acid.

14. TRANSPORT INFORMATION

Land Transport (Australia)

Regulation Name ADG

UN Number Not applicable.

Shipping Name SODIUM BICARBONATE

Dangerous Goods Class Not applicable.

Subsidiary Risk Not applicable.

Pack Group Not applicable.

Precaution for User No data available.

Hazchem Code N/A

EPG Not applicable.

Special Provision Not applicable.

Sea Transport (New Zealand)

Regulation Name IMDG

UN Number Not applicable.

Shipping Name SODIUM BICARBONATE

Dangerous Goods Class Not applicable.

Subsidiary Risk Not applicable.

Pack Group Not applicable.

Precaution for User No data available.

Hazchem Code N/A

EPG Not applicable.

Special Provision Not applicable.

Air Transport Regulation

Name IATA

UN Number Not applicable.

Shipping Name SODIUM BICARBONATE

Dangerous Goods Class Not applicable.

Subsidiary Risk Not applicable.

Pack Group Not applicable.

Precaution for User No data available.

Hazchem Code No data available.

EPG No data available.

Special Provision Not applicable.

Land Transport (New Zealand)

Regulation Name NZS5433

UN Number Not applicable.

Shipping Name SODIUM BICARBONATE

Dangerous Goods Class Not applicable.

Subsidiary Risk Not applicable.

Pack Group Not applicable.

Precaution for User No data available.

Hazchem Code N/A

EPG Not applicable.

Special Provision Not applicable.

15. REGULATORY INFORMATION

Poisons Schedule N/A

EPG N/A

AICS Name CARBONIC ACID, MONOSODIUM SALT

NZ Toxic Substance N

HSNO Hazard Classification No data available.

ERMA Approval Code No data available.

16. OTHER INFORMATION

Literature References No data available.

Sources for Data No data available.

Legend to Abbreviations and Acronyms

< less than

> greater than

ADG Australian Dangerous Goods Code

AICS Australian Inventory of Chemical Substances

CAS Chemical Abstracts Service (Registry Number)

cm² square centimetres

CO₂ Carbon Dioxide

COD Chemical Oxygen Demand

deg C (°C) degrees Celsius

ERMA Environmental Risk Management Authority

g gram

g/cm³ grams per cubic centimetre

g/l grams per litre

HSNO Hazardous Substance and New Organism

IATA International Air Transport Association Dangerous Goods Regulations

IDLH Immediately Dangerous to Life and Health

IMDG International Maritime Dangerous Goods Code

immiscible liquids are insoluble in each other

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 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 miscible

miscible liquids form one homogeneous liquid phase regardless of the amount of either component present

mm millimetre

mPa.s milli Pascal per second

N/A Not Applicable

NOHSC National Occupational Health and Safety Commission
OECD Organization for Economic Co-operation and Development
PEL Permissible Exposure Limit
ppb parts per billion
ppm parts per million
ppm/2h parts per million per 2 hours
ppm/6h parts per million per 6 hours
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 (number)
wt weight

This MSDS summarises Price Chemicals Pty Ltd best knowledge of the health and safety hazard information of the selected substance and how to safely handle the selected substance in the workplace however Price Chemicals Pty Ltd expressly disclaims that the MSDS is a representation or guarantee of the chemical specifications for the substance.

Each user should read the MSDS and consider the information in the context of how the selected substance will be handled and used in the workplace including its use in conjunction with other substances.

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