



PRICE CHEMICALS PTY LIMITED

ABN 92 002 585 293

10 Pile Road
Somersby NSW 2250
Phone: (02) 4340 0088
Fax: (02) 4340 0322

E-mail: enquiries@pricechemicals.com.au

MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION

Revision Date JULY 2011

Product Name SODIUM CARBONATE

Other Names SODA ASH ; CALCINED SODA ; CARBONIC ACID DISODIUM SALT ; DISODIUM CARBONATE; BISODIUM CARBONATE, SODIUM CARBONATE ANH

Uses Glass manufacture, chemicals, pulp and paper manufacture, sodium compounds, soaps and detergents, water treatment, aluminium production, textile processing, (eg. bleaching of linen, hemp, cotton), cleaning preparations, petroleum refining, sealing ponds from leakage (sodium ions bind to clay particles, which swell to seal leaks), catalyst in coal liquefaction, photographic agent, food additive.

Contact Information

Organisation	Location	Telephone	Ask For
Price Chemicals 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

Hazardous according to criteria of NOHSC/ASCC.IRRITANT

Risk Phrases

R36 Irritating to eyes.

Safety Phrases

S2 Keep out of reach of children.

S22 Do not breathe dust.

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

ERMA New Zealand Approval Code HSR003265

HSNO Hazard Classification 6.1D 6.1E 6.3A 6.4A

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 CARBONATE	[497-19-8]	100

4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure.

Swallowed Rinse mouth with water. Give plenty of water to drink provided victim is conscious. Do NOT induce vomiting. Seek medical attention.

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

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

Inhaled Remove victim from exposure to fresh air. If breathing is difficult, give oxygen as needed. Seek medical attention.

Advice to Doctor Treat symptomatically based on individual reactions of patient and judgement of doctor. NOTE: For advice in an emergency, contact a Poisons Information Centre (Australia 13-11-26 or New Zealand 0800-764-766).

Aggravated medical conditions caused by exposure Persons with pre-existing eye disorders, skin disease or respiratory problems may be more susceptible to the effects from this product.

5. FIRE FIGHTING MEASURES

Extinguishing Media In case of fire, appropriate extinguishing media include; Small fire- use dry chemical, carbon dioxide, water spray or foam. Large fire- use water spray, fog or foam.

Hazards from Combustion Products Non-combustible solid. Incompatible with oxidizing agents, acids, aluminium powder, hydrated lime, fluorine, phosphorous pentoxide, sulfuric acid, ammoniacal silver nitrate, molten lithium, magnesium and sources of ignition. Violent reaction with acids or water generating heat. Violent reaction with phosphorus pentoxide. Mixture with fluorine may ignite and burn fiercely. May cause explosive reaction with magnesium. May cause explosive reaction with aluminium, if aluminium is red hot. Reacts with hydrated lime in the presence of moisture to form corrosive caustic soda. Hazardous decomposition products include carbon dioxide, carbon monoxide, sodium oxide and sodium.

Special Protective Precautions and Equipment for Fire Fighters Fire fighters should wear a self contained breathing apparatus and full protective clothing along with protective equipment.

Flammability Conditions Product is a non-flammable solid.

Additional Information

Hazchem Code N/A

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures Personnel involved in the clean up should wear full protective clothing. Eliminate all sources of ignition. Increase ventilation. Avoid generating dust. Do not allow product to reach drains, sewers or waterways. If the product does enter a waterway, advise the Environmental Protection Authority or your local Waste Management Authority. Use spark-proof tools and equipment.

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 container and hold for disposal.

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.

Conditions for Safe Storage (Including Any Incompatibles) Store in a cool, dry, well-ventilated area. Keep containers tightly sealed when not in use. Inspect regularly for deficiencies such as damage or leaks. Protect from physical damage. Store away from incompatible materials including oxidizing agents, acids, hydrated lime, aluminium powder, fluorine, phosphorous pentoxide, sulphuric acid, ammoniacal silver nitrate, molten lithium and sources of ignition. Protect from direct sunlight, moisture and static charges. Hygroscopic. 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 Packaging must comply with requirements of Hazardous Substances (Packaging) Regulations 2001. Store in original packaging as approved by manufacturer.

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) formerly known as NOHSC. However, the exposure standard for dust not otherwise specified is 10mg/m³ (for inspirable dust) and 3mg/m³ (for respirable dust).

Biological Limit Values Currently, there are no Biological Exposure Indices (BEIs) determined for the components of 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 an approved, suitable respirator (AS1715/1716) where engineering controls are inadequate. EYES: Safety glasses with side shields (AS1336/1337). HANDS: Wear protective gloves (AS2161). CLOTHING: Protective coveralls and safety footwear (AS3765/2210).

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance white granular solid

Formula Na₂CO₃

Odour odourless

Vapour Pressure Not applicable.

Vapour Density Not applicable.

Boiling Point Decomposes deg C

Melting Point 851'C deg C

Solubility in Water 220g/L (20'C)

Specific Gravity 2.532 (Water = 1)

Flash Point Not applicable.

pH 11.5 (50g/L H₂O (25'C))

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 Not applicable.

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 No data available.

Decomposition Temperature No data available.

Additional Information Molecular Weight: 105.99 Bulk Density: 50-65lb/cu ft Solubility: Soluble in glycerol. Insoluble in alcohol.

10. STABILITY AND REACTIVITY

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

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

Incompatible Materials Incompatible with oxidizing agents, acids, hydrated lime, aluminium powder, fluorine, phosphorous pentoxide, sulphuric acid, ammoniacal silver nitrate, molten lithium, magnesium, alkaline metals, organic nitro compounds, water and sources of ignition.

Hazardous Decomposition Products Hazardous decomposition products include carbon dioxide, carbon monoxide, sodium oxide and sodium. Reacts with hydrated lime in the presence of moisture to form corrosive caustic soda.

Hazardous Reactions Hazardous polymerization will not occur. Reacts with hydrated lime in the presence of moisture to form caustic soda which is a corrosive. Violent reaction with acids or water generating heat. Violent reaction with phosphorus pentoxide. Mixture with fluorine may ignite and burn fiercely. May cause explosive reaction with magnesium. May cause explosive reaction with aluminium, if aluminium is red hot.

11. TOXICOLOGICAL INFORMATION

Toxicity Data Oral LD50 Rat: 2463mg/Kg (intraperitoneal) Oral LD50 Mouse: 117mg/Kg Skin Irritation: 50mg/24hr (rabbit) moderate Eye Irritation: 100mg/24hr (rabbit) severe

Health Effects - Acute

Swallowed May be harmful if swallowed. May cause irritation of the mouth, throat and stomach. Concentrated solutions may be corrosive, resulting in cramps, vomiting, diarrhoea and possibly circulatory collapse and death.

Eye Dust or concentrated solutions may irritate or burn the eyes. Prolonged contact may cause permanent damage.

Skin Dust and weak solutions may be irritating to skin of sensitive individuals causing redness and blistering. Concentrated solutions may be corrosive, causing severe irritation and burning. Repeated/prolonged skin contact may cause dermatitis and ulceration of the skin.

Inhaled Inhalation of dust may cause irritation of the nose, throat and lungs. Symptoms may include coughing, sneezing, headache, laryngitis and difficulty breathing.

12. ECOLOGICAL INFORMATION

Ecotoxicity Fish LC50 L. macrochirus 96hr: 300mg/L Daphnia magna EC50 48hr: 265mg/L

Persistence and Degradability No information available on persistence/degradability for this product.

Mobility No information available on mobility for this product.

Environmental Fate (Exposure) Avoid contaminating waterways, drains and sewers.

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.

Special Precautions for Land Fill or Incineration The waste code classification is to be carried out according to the European Waste Catalogue (EWC) specifically for each branch of industry and each type of process.

14. TRANSPORT INFORMATION

Land Transport (Australia)

Regulation Name ADG Code

UN Number Not applicable.

Shipping Name SODIUM CARBONATE

Dangerous Goods Class Not applicable.

Subsidiary Risk Not applicable.

Pack Group Not applicable.

Precaution for User IRRITANT

Hazchem Code N/A

EPG Not applicable.

Special Provision Not applicable.

Land Transport (New Zealand)

Regulation Name NZS5433

UN Number Not applicable.

Shipping Name SODIUM CARBONATE

Dangerous Goods Class Not applicable.

Subsidiary Risk Not applicable.

Pack Group Not applicable.

Precaution for User IRRITANT

Hazchem Code N/A

EPG Not applicable.

Special Provision Not applicable.

Sea Transport

Regulation Name IMDG Code

UN Number No data available.

Shipping Name No data available.

Dangerous Goods Class No data available.

Subsidiary Risk No data available.

Pack Group No data available.

Precaution for User IRRITANT

Hazchem Code No data available.

EPG No data available.

Special Provision Not applicable.

15. REGULATORY INFORMATION

This product is classified hazardous according to the criteria of European Annex I Directive 67/548/EEC.

Poisons Schedule 5

EPG N/A

AICS Name CARBONIC ACID, DISODIUM SALT

NZ Toxic Substance 4

HSNO Hazard Classification 6.1D 6.1E 6.3A 6.4A

ERMA Approval Code HSR003265

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.

© Copyright 2011 Price Chemicals Pty Ltd