

1. IDENTIFICATION

Product Name	Soda Ash Dense			
Other Names	Carbonic acid disodium salt; Carbonic acid, disodium salt; Disodium Carbonate; Soda Ash; Sodium Carbonate; Sodium Carbonate, Anhydrous			
Uses	Glass manufacturing, chemical manufacturing, pulp and paper, water treatment and pH control, soap and detergent manufacturing, coal treatment, emission control, iron exchange resin regeneration.			
Chemical Family	Inorganic (alkaline) salt			
Chemical Formula	Na ₂ CO ₃			
Chemical Name	Soda Ash Dense			
Product Description	No Data Available			
Contact Information	Organisation	Location	Telephone	Ask For
	Redox Pty Ltd	2 Swettenham Road Minto NSW 2566 Australia	+61-2-97333000	MSDS Officer
		11 Mayo Road Wiri Auckland 2104 New Zealand	+64-9-2506222	
	Poisons Information Centre	Westmead NSW	1800-251525 131126	
	Chemcall	Australia New Zealand	1800-127406 0800-243622 +64-3-3530199	
	National Poisons Centre	New Zealand	0800-764766	

2. HAZARD IDENTIFICATION

ADG Code	Non-Dangerous Goods according to the criteria of the Australian Dangerous Goods Code (ADG Code).		
SWA Hazard Classification	Hazardous according to the criteria of Safe Work Australia [NOHSC:1008(2004)]		
Categories	Xi	Irritant	
Risk Phrases	R36	Irritating to eyes.	
Safety Phrases			
HSNO Hazard Classification	6.1D; 6.3A; 6.4A; 6.1E		
Poisons Schedule (Aust)	5		

This Material Safety Data Sheet may not provide exhaustive guidance for all HSNO Controls assigned to this substance. The [EPA \(New Zealand\) web site](#) should be consulted for a full list of triggered controls and cited regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Sodium Carbonate	Na ₂ CO ₃	497-19-8	99.8 %

4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure

Swallowed	If victim is conscious and alert, give 1-2 glasses of water to drink. Do not give anything by mouth to an unconscious person. Seek immediate medical attention. Do not leave victim unattended.
Eye	Hold eyelids open and flush with a steady, gentle stream of water for at least 15 minutes. Seek immediate medical attention.
Skin	In case of contact, immediately wash with plenty of soap and water for at least 5 minutes. See medical attention if irritation develops or persists. Remove contaminated clothing and shoes. Clean contaminated clothing and shoes before re-use.
Inhaled	Remove victim from immediate source of exposure and assure that the victim is breathing. If breathing is difficult, administer oxygen, if available. If victim is not breathing, administer CPR (cardio-pulmonary resuscitation). Seek immediate medical attention.
Advice to Doctor	Treat symptomatically based on judgement of doctor and individual reactions of patient.
Medical Conditions Aggravated by Exposure	No information available on medical conditions aggravated by exposure to this product.

5. FIRE FIGHTING MEASURES

General Measures	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.
Flammability Conditions	Product is a non-flammable solid.
Extinguishing Media	In case of fire, use appropriate extinguishing media most suitable for surrounding fire conditions. Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Fire and Explosion Hazard	Non-Combustible.
Hazardous Products of Combustion	Carbon oxides, Sodium oxides.
Special Fire Fighting Instructions	Do NOT allow fire fighting water to reach waterways, drains or sewers. Store fire fighting water for treatment.
Personal Protective Equipment	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).
Flash Point	No Data Available
Lower Explosion Limit	No Data Available
Upper Explosion Limit	No Data Available
Auto Ignition Temperature	No Data Available
Hazchem Code	No Data Available

6. ACCIDENTAL RELEASE MEASURES

General Response Procedure	Avoid accidents, clean up immediately. Slippery when spilt. Eliminate all sources of ignition. Increase ventilation. Avoid generating dust. Stop leak if safe to do so. Isolate the danger area. Use clean, non-sparking tools and equipment.
Clean Up Procedures	Contain and sweep/shovel up spills with dust binding material or use an industrial vacuum cleaner. Transfer to a suitable, labelled container and dispose of promptly. Large spills should be handled according to a predetermined plan.
Containment	Stop leak if safe to do so. Isolate the danger area.
Decontamination	Decontaminate tools and equipment following clean up. Clean up residual material by washing area with water.
Environmental Precautionary Measures	Do NOT let product reach drains or waterways. If product does enter a waterway, advise the Environmental Protection Authority or your local Waste Management.
Evacuation Criteria	Evacuate all unnecessary personnel.
Personal Precautionary Measures	Personnel involved in the clean up should wear full protective clothing as listed in section 8.

7. HANDLING AND STORAGE

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.
Storage	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. Protect from direct sunlight, moisture and static discharges. This product is not classified dangerous for transport according to The Australian Code for the Transport of Dangerous Goods By Road and Rail.
Container	Store in original packaging as approved by manufacturer.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General	No exposure standard has been established for this product by the Safe Work Australia (SWA). However, the exposure standard for dust not otherwise specified is 10mg/m ³ (for inspirable dust) and 3mg/m ³ (for respirable dust). NOTE: The exposure value at the TWA is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. These 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 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.
Exposure Limits	No Data Available
Biological Limits	No information available on biological limit values for this product.
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. Adequate ventilation should be provided so that exposure limits are not exceeded.
Personal Protection Equipment	RESPIRATOR: Air -purifying (half-mask / full-face) respirator with cartridges / canister approved for use against dusts, mists and fumes (AS1715/1716). EYES: Protective glasses or goggles should be worn when this product is being used (AS1336/1337). HANDS: Wear suitable impervious elbow-length gloves (AS2161). CLOTHING: Long-sleeved protective clothing and safety footwear (AS3765/2210).
Special Hazards Precautions	Thoroughly launder protective clothing before storage or re-use. Advise laundry of nature of contamination when sending contaminated clothing to laundry.
Work Hygienic Practices	No Data Available

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solid
Appearance	Granular Solid
Odour	Odourless
Colour	White
pH	11.3 1% solution
Vapour Pressure	No Data Available
Relative Vapour Density	No Data Available
Boiling/Melting Point	No Data Available
Solubility	217 g/l °C
Freezing Point	No Data Available
Specific Gravity	2.53
Flash Point	No Data Available
Auto Ignition Temp	No Data Available
Evaporation Rate	No Data Available
Bulk Density	No Data Available
Corrosion Rate	No Data Available
	400 °C

Decomposition Temperature	
Density	No Data Available
Specific Heat	No Data Available
Molecular Weight	No Data Available
Net Propellant Weight	No Data Available
Octanol Water Coefficient	No Data Available
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 Data Available
Potential for Dust Explosion	No Data Available
Fast or Intensely Burning Characteristics	No Data Available
Flame Propagation or Burning Rate of Solid Materials	No Data Available
Non-Flammables That Could Contribute Unusual Hazards to a Fire	No Data Available
Properties That May Initiate or Contribute to Fire Intensity	No Data Available
Reactions That Release Gases or Vapours	No Data Available
Release of Invisible Flammable Vapours and Gases	No Data Available

10. STABILITY AND REACTIVITY

Chemical Stability	Product is stable under normal conditions of use, storage and temperature.
Conditions to Avoid	Extreme Heat; Hygroscopic. Protect from moisture, Mixing of acid and sodium carbonate solutions could cause carbon dioxide evolution.
Materials to Avoid	Aluminum Fluorine Humid Air Moisture Sulfuric Acid Acids Magnesium Phosphorus Pentoxide.
Hazardous Decomposition Products	Decomposition Temperature: 400 Deg C. Decomposition product: Carbon dioxide.
Hazardous Polymerisation	This product is unlikely to react or decompose under normal storage conditions. However, if you have any doubts, contact the supplier for advice on shelf life properties. The product will not undergo polymerisation reactions.

11. TOXICOLOGICAL INFORMATION

General Information	<p>Acute Eye Irritation: Toxicological Information and Interpretation Eye – Eye Irritation, 25 mg/Kg, Rabbit. Severely Irritating; Muscle contraction or spasticity.</p> <p>Acute Skin Irritation: Toxicological Information and Interpretation Skin – 500 mg/24 hour Skin Irritation, Rabbit. Mildly irritating.</p> <p>Acute Dermal Toxicity LD50. Rabbit: >2,000 mg/kg</p> <p>Acute Inhalation Toxicity: Toxicological Information and Interpretation LD50 – Lethal Concentration. 50% of Test Species, 2,300 mg/cu m/2hr, rat.</p> <p>Acute Oral Toxicity: Toxicological Information and Interpretation LD50 – Lethal Dose. 50% of Test Species, 4,090 mg/kg, rat.</p>
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Chronic Toxicity
 This product does not contain any substances that are considered by OSHA, NTP, IARC or ACGIH to be "probably" or "suspected" human carcinogens

Eyelrritant May cause severe irritation, redness, or swelling.

Ingestion May cause gastrointestinal irritation, nausea, vomiting, or diarrhea.

Inhalation May cause upper respiratory tract, lung, and irritation to mucus membranes.

SkinIrritant May cause itching, redness, or swelling.

Carcinogen Category 0

12. ECOLOGICAL INFORMATION

Ecotoxicity Toxicity
 Toxicity to fish LC50 - Lepomis macrochirus (Bluegill) - 300 mg/l - 96 h
 Toxicity to daphnia and other aquatic invertebrates EC50 - Daphnia magna (Water flea) - 265 mg/l - 48 h

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

Mobility No information available on mobility for this product.

Environmental Fate Do NOT let product reach waterways, drains and sewers.

Bioaccumulation Potential No information available on bioaccumulation for this product.

Environmental Impact No Data Available

13. DISPOSAL CONSIDERATIONS

General Information 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. Rinse containers before disposal.

Special Precautions for Land Fill Contact a specialist disposal company or the local waste regulator for advice.

14. TRANSPORT INFORMATION

ADG Code Non-Dangerous Goods according to the criteria of the Australian Dangerous Goods Code (ADG Code).

Air

IATA

Proper Shipping Name SODA ASH DENSE
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

Land

Australia: ADG

Proper Shipping Name SODA ASH DENSE
Class No Data Available

Subsidiary Risk(s) No Data Available
No Data Available
UN Number No Data Available
Hazchem No Data Available
Pack Group No Data Available
Special Provision No Data Available

Malaysia: NZS5433

Proper Shipping Name SODA ASH DENSE
Class No Data Available
Subsidiary Risk(s) No Data Available
No Data Available
UN Number No Data Available
Hazchem No Data Available
Pack Group No Data Available
Special Provision No Data Available

New Zealand: NZS5433

Proper Shipping Name SODA ASH DENSE
Class No Data Available
Subsidiary Risk(s) No Data Available
No Data Available
UN Number No Data Available
Hazchem No Data Available
Pack Group No Data Available
Special Provision No Data Available

Papua New Guinea:

Proper Shipping Name SODA ASH DENSE
Class No Data Available
Subsidiary Risk(s) No Data Available
No Data Available
UN Number No Data Available
Hazchem No Data Available
Pack Group No Data Available
Special Provision No Data Available

United States of America: US DOT

Proper Shipping Name SODA ASH DENSE
Class No Data Available
Subsidiary Risk(s) No Data Available
No Data Available
UN Number No Data Available
Hazchem No Data Available
Pack Group No Data Available
Special Provision No Data Available

Sea

IMDG

Proper Shipping Name	SODA ASH DENSE
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

15. REGULATORY INFORMATION

General Information No Data Available

EPA (New Zealand)

Hazardous Substances and New Organisms Act (HSNO)

Approval Code: HSR003265

Poisons Schedule (Aust) 5

AICS Name Carbonic acid, disodium salt

16. OTHER INFORMATION

Related Product Codes

SODCAL1000, SOCABR1000, SOCABR1100, SOCABR2000, SOCARB1000, SOCARB1001, SOCARB1002, SOCARB1003, SOCARB1004, SOCARB1005, SOCARB1006, SOCARB1007, SOCARB1008, SOCARB1009, SOCARB1010, SOCARB1011, SOCARB1012, SOCARB1013, SOCARB1014, SOCARB1015, SOCARB1016, SOCARB1017, SOCARB1018, SOCARB1019, SOCARB1100, SOCARB1101, SOCARB1102, SOCARB1103, SOCARB1104, SOCARB1105, SOCARB1200, SOCARB1201, SOCARB1202, SOCARB1300, SOCARB1500, SOCARB1501, SOCARB1600, SOCARB2000, SOCARB2500, SOCARB2501, SOCARB2502, SOCARB2503, SOCARB2504, SOCARB2505, SOCARB2600, SOCARB3000, SOCARB4000, SOCARB4600, SOCARB4700, SOCARB4701, SOCARB4800, SOCARB4900, SOCARB5000, SOCARB5001, SOCARB5100, SOCARB5200, SOCARB5201, SOCARB5300, SOCARB5400, SOCARB5500, SOCARB5501, SOCARB5600, SOCARB5700, SOCARB5800, SOCARB5900, SOCARB6000, SOCARB6001, SOCARB6100, SOCARB6200, SOCARB7000, SOCARB7001, SOCARB8000, SOCARB8001, SOCARB8002, SOCARB8100, SOCARB8101, SOCARB9000, SODCAB1000, SODCAB1001, SODCAB1002, SODCAB1003, SODCAB1004, SODCAB1005, SODCAB1006, SODCAB1100, SODCAB1101, SODCAB1102, SODCAB1103, SODCAB1104, SODCAB1105, SODCAB1106, SODCAB1200, SODCAB2600, SODCAB2700, SODCAB2800, SODCAB2900, SODCAB3000, SODCAB3100, SODCAB3200, SODCAB3300, SODCAB3400, SODCAB3500, SODCAB3600, SODCAB3700, SODCAB3800, SODCAB3900, SODCAB4000, SODCAB4100, SODCAB4200, SODCAB4300, SODCAB5500, SODCAB5800, SODCAB5801, SODCAB5900, SODCAB6000, SODCAB6001, SODCAB6100, SODCAB7000, SODCAB7500, SODCAB7600, SODCAB8000, SODCAB8800, SODCAB9000, SODCAB9500, SODCAB9600, SODCAR0500, SODCAR0501, SODCAR0502, SODCAR0503, SODCAR1000, SODCAR1001, SODCAR1002, SODCAR1003, SODCAR1004, SODCAR1005, SODCAR1006, SODCAR1007, SODCAR1008, SODCAR1009, SODCAR1100, SODCAR2000, SODCAR2001, SODCAR3000, SODCAR3001, SODCAR3100, SODCAR3300, SODCAR3400, SODCAR3500, SODCAR4000, SODCAR5000, SODCAR5001, SODCAR5500, SODCAR7000, SODCAR7500, SODCAR9000, SODCAR9500, SOCARF1000, SOCARF1001, SOCARF2500, SOCARF5000, SOCARF5001, SOCARF5100, SOCARF5200, SOCARF9900, SOCARB9500, SOCARB1807, SOCARB1808, SOCARB1809, SOCARB1810, SOCARB1811, SOCARB1812, SOCARB1813, SOCARB1814, SOCARB1815, SOCARB1816, SOCARB1817, SOCARB1818, SOCARB9990, SOCARB5510, SODCAB2901, SOCARB9200, SODCAB6010, SODCAB5910, SOCARB1150, SOCARB6500, SOCARB6501, SODCAB6500, SODCAB6501, SODCAR6500, SOCARB5601, SODCAB1107, SOCARB6600, SOCARB6601, SODCAB6600, SODCAB6601, SOCARB1700, SOCARB1106, SOCARB9600, SODCAB6605, SODCAB1210, SOCARB5602, SOCARB5605, SOCARB0215, SOCARB2515, SOCARB0005, SOCARF5002, SOCARB5110, SOCARB5401, SODCAB6015, SOCARB1650

Revision 3

Revision Date 29 Dec 2014

< Less Than
> Greater Than

Key/Legend

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 insoluable 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 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
OECD Organisation for Economic Co-operation and Development
Oz Ounce
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
tne Tonne
torr Millimetre of Mercury
TWA Time Weighted Average
ug/24H Micrograms per 24 Hours
UN United Nations
wt Weight