

1. IDENTIFICATION

Product Name	Soda Ash, Light
Other Names	Soda ash; Sodium carbonate; Sodium carbonate, anhydrous; Washing soda
Uses	Cleaning agents and additives; Dishwashing and laundry detergents; Photochemicals; Fillers; Laboratory chemicals; pH-regulating/buffering agent; Glass industry, chemical industry, metallurgy; Purifying flue gas.
Chemical Family	No Data Available
Chemical Formula	Na ₂ CO ₃
Chemical Name	Carbonic acid, disodium salt
Product Description	No Data Available

Contact Details of the Supplier of this Safety Data Sheet

Organisation	Location	Telephone
Redox Pty Ltd	2 Swettenham Road Minto NSW 2566 Australia	+61-2-97333000
Redox Pty Ltd	11 Mayo Road Wiri Auckland 2104 New Zealand	+64-9-2506222
Redox Inc.	3960 Paramount Boulevard Suite 107 Lakewood CA 90712 USA	+1-424-675-3200
Redox Chemicals Sdn Bhd	Level 2, No. 8, Jalan Sapir 33/7 Seksyen 33, Shah Alam Premier Industrial Park 40400 Shah Alam Sengalor, Malaysia	+60-3-5614-2111

Emergency Contact Details


For emergencies only; DO NOT contact these companies for general product advice.

Organisation	Location	Telephone
Poisons Information Centre	Westmead NSW	1800-251525 131126
Chemcall	Australia	1800-127406 +64-4-9179888
Chemcall	Malaysia	+64-4-9179888
Chemcall	New Zealand	0800-243622 +64-4-9179888
National Poisons Centre	New Zealand	0800-764766
CHEMTREC	USA & Canada	1-800-424-9300 CN723420 +1-703-527-3887

2. HAZARD IDENTIFICATION

Poisons Schedule (Aust) Not Scheduled

Globally Harmonised System

Hazard Classification	Hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS)		
Hazard Categories	Acute Toxicity (Oral) - Category 5 Serious Eye Damage/Irritation - Category 2A		
Pictograms			
Signal Word	Warning		
Hazard Statements	H303	May be harmful if swallowed.	
	H319	Causes serious eye irritation.	
Precautionary Statements	Prevention	P280	Wear eye protection/face protection.
		P264	Wash hands and face thoroughly after handling.
	Response	P337 + P313	If eye irritation persists: Get medical advice/attention.
		P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
		P312	Call a POISON CENTER or doctor/physician if you feel unwell.

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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Environmental Protection Authority (New Zealand)

Hazardous Substances and New Organisms Amendment Act 2015

HSNO Classifications	Health Hazards	6.1D	Substances that are acutely toxic - Harmful
		6.1E	Substances that are acutely toxic –May be harmful, Aspiration hazard
		6.3A	Substances that are irritating to the skin
		6.4A	Substances that are irritating to the eye

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Sodium carbonate	NaCO ₃	497-19-8	<=100 %

4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure

Swallowed	IF SWALLOWED: Rinse mouth, then drink plenty of water. Do NOT induce vomiting. Call a Poison Centre or doctor/physician if you feel unwell. Never give anything by mouth to an unconscious person.
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 until advised to stop by a Poisons Information Centre or doctor/physician, or for at least 15 minutes. If eye irritation persists, get medical advice/attention.

Skin	IF ON SKIN (or hair): Remove contaminated clothing and shoes immediately. Flush skin and hair with running water for several minutes; Wash with plenty of soap and water. If skin irritation occurs, get medical advice/attention. Wash contaminated clothing and shoes before reuse.
Inhaled	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing until recovered. If respiratory symptoms persist, get medical advice/attention. Apply resuscitation if victim is not breathing. Administer oxygen if breathing is difficult.
Advice to Doctor	Treat symptomatically.
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; Material does not burn.
Extinguishing Media	If material is involved in a fire, use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Fire and Explosion Hazard	Decomposes on heating, emitting toxic fumes.
Hazardous Products of Combustion	Fire or heat may produce irritating and/or toxic fumes, including oxides of Carbon.
Special Fire Fighting Instructions	Contain runoff from fire control 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 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	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	Collect material (sweep up/shovel) and place it in suitable, properly labelled containers for disposal (see SECTION 13); if appropriate, moisten first to prevent dusting.
Containment	Stop leak if safe to do so – Prevent entry into waterways, drains or confined areas. Prevent dust cloud.
Decontamination	Wash area down with excess water. Do not flush into surface water or sanitary sewer system. Prevent any mixture with an acid into the sewer/drain (gas formations).
Environmental Precautionary Measures	Prevent entry into soils, drains and waterways. Local authorities should be advised if significant spillages cannot be contained.
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 generation and accumulation. Avoid breathing dust and contact with eyes, skin and clothing. Use personal protective equipment
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as required (see SECTION 8).

Storage	Store in a cool, dry and well-ventilated place. Keep container tightly closed. Protect from moisture (hygroscopic). Keep away from incompatible materials (see SECTION 10).
Container	Keep in the original or suitable, properly labelled containers. Suitable packaging material: Polyethylene; Woven plastic material.

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/m ³ (measured as inhalable dust). - New Zealand WES (Particulates not otherwise classified): TWA = 10 mg/m ³ (total); TWA = 3 mg/m ³ (respirable).
Exposure Limits	No Data Available
Biological Limits	No information available.
Engineering Measures	Provide appropriate exhaust ventilation at places where dust is formed. 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: Wear respiratory protection in case of inadequate ventilation or if an inhalation risk exists. Recommended: Dust mask/respirator (refer to AS/NZS 1715 & 1716). - Eye/face protection: Wear appropriate eye protection to avoid eye contact. Recommended: Safety goggles. - Hand protection: Handle with gloves. Recommended: Impervious gloves, e.g. Neoprene, Natural rubber. - Skin/body protection: Wear appropriate personal protective clothing to avoid skin contact. Recommended: Overalls, safety shoes.
Special Hazards Precautions	No information available.
Work Hygienic Practices	Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Take off contaminated clothing and wash before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solid
Appearance	Powder
Odour	Odourless
Colour	White
pH	11.2 (4 g/l 25 °C) - 11.3 (10 g/l 25 °C)
Vapour Pressure	Negligible (@ No Data Available)
Relative Vapour Density	No Data Available
Boiling Point	No Data Available
Melting Point	851 °C
Freezing Point	No Data Available
Solubility	212.5 g/l water 20°C
Specific Gravity	2.53
Flash Point	No Data Available
Auto Ignition Temp	No Data Available
Evaporation Rate	No Data Available
Bulk Density	0.5 - 0.6 kg/m ³ [free flow]
Corrosion Rate	No Data Available
Decomposition Temperature	>400 °C
Density	No Data Available
Specific Heat	No Data Available
Molecular Weight	106 g/mol
Net Propellant Weight	No Data Available

Octanol Water Coefficient	No Data Available
Particle Size	<125 µm (80 - 90 %)
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	pKa: 6.4 - 10.3
Potential for Dust Explosion	No information available.
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; Material does not burn.
Reactions That Release Gases or Vapours	Decomposes on heating, emitting toxic fumes, including Carbon oxides.
Release of Invisible Flammable Vapours and Gases	No information available.

10. STABILITY AND REACTIVITY

General Information	The solution in water is a medium-strong base. Reacts violently with acids. Reacts with magnesium, phosphorous pentoxide causing explosion hazard. Reacts with fluorine causing fire hazard.
Chemical Stability	Stable under recommended storage conditions.
Conditions to Avoid	Avoid dust formation. Avoid exposure to moisture.
Materials to Avoid	Incompatible/reactive with acids, magnesium, phosphorus pentoxide, fluorine, (finely divided) aluminium.
Hazardous Decomposition Products	Decomposes on heating, emitting toxic fumes, including Carbon oxides.
Hazardous Polymerisation	No information available.

11. TOXICOLOGICAL INFORMATION

General Information	<ul style="list-style-type: none"> - Acute toxicity: The product has low acute (oral) toxicity. No adverse health effects expected; However, ingestion of large amounts may cause nausea and vomiting. - Skin corrosion/irritation: May cause skin irritation. Not classified as irritating to skin (Rabbit) [OECD TG 404]. - Eye damage/irritation: Causes serious eye irritation. Irritating to eyes (Rabbit) [according to a standardised method]. - Respiratory/skin sensitisation: No information available. - Germ cell mutagenicity: Product is not considered to be genotoxic. - Carcinogenicity: Not considered carcinogenic. Not listed as carcinogenic according IARC. - Reproductive toxicity: The product does not show specific reproductive or developmental toxicity. - STOT (single exposure): The dust may be irritating to the respiratory tract. - STOT (repeated exposure): Systemic toxicity is not expected. - Aspiration toxicity: No information available.
Acute	
Ingestion	Acute toxicity (Oral): - LD50, Rat (male/female): 2,800 mg/kg
Other	Acute toxicity (Dermal): - LD50, Rabbit: >2,000 mg/kg (no mortality observed at this concentration).
Carcinogen Category	None

12. ECOLOGICAL INFORMATION

Ecotoxicity	Aquatic toxicity: - LC50, Fish: Lepomis macrochirus (Bluegill sunfish) static test: 300 mg/l (96 h). - EC50, Aquatic invertebrates: Ceriodaphnia dubia (water flea) semi-static test: 200 - 227 mg/l (48 h). * Not considered harmful to aquatic life (LC/LL50, EC/EL50: >100 mg/l).
Persistence/Degradability	The product is not considered to be rapidly degradable in the environment. - Biodegradability: Not applicable (inorganic substance).
Mobility	No information available.
Environmental Fate	Prevent entry into soils, drains and waterways.
Bioaccumulation Potential	Bioconcentration factor (BCF): Not applicable (inorganic substance).
Environmental Impact	No Data Available

13. DISPOSAL CONSIDERATIONS

General Information	If recycling is not practicable, dispose of product/packaging in accordance with local/regional/national regulations.
Special Precautions for Land Fill	Cleaning and disposal of packaging: Where possible, recycling is preferred to disposal or incineration. Clean container with water; Dispose of rinse water in accordance with local and national regulations.

14. TRANSPORT INFORMATION

Land Transport (Australia)

ADG Code

Proper Shipping Name	Soda Ash, Light
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 Transport (Malaysia)

ADR Code

Proper Shipping Name	Soda ash, Light
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 Transport (New Zealand)

NZS5433

Proper Shipping Name	Soda Ash, Light
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

Land Transport (United States of America)

US DOT

Proper Shipping Name	Soda Ash, Light
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 Transport

IMDG Code

Proper Shipping Name	Soda Ash, Light
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

Air Transport

IATA DGR

Proper Shipping Name	Soda Ash, Light
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

National Transport Commission (Australia)

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15. REGULATORY INFORMATION

General Information	No Data Available
Poisons Schedule (Aust)	Not Scheduled

Environmental Protection Authority (New Zealand)

Hazardous Substances and New Organisms Amendment Act 2015

Approval Code	HSR003265
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National/Regional Inventories

Australia (AICS)	Listed
Canada (DSL)	Not Determined
Canada (NDSL)	Not Determined
China (IECSC)	Not Determined
Europe (EINECS)	207-838-8
Europe (REACH)	Not Determined
Japan (ENCS/METI)	Not Determined
Korea (KECI)	Not Determined
Malaysia (EHS Register)	Not Determined
New Zealand (NZIoC)	Listed
Philippines (PICCS)	Not Determined
Switzerland (Giftliste 1)	Not Determined
Switzerland (Inventory of Notified Substances)	Not Determined
Taiwan (NCSR)	Not Determined
USA (TSCA)	Not Determined

16. OTHER INFORMATION

Related Product Codes	SOCARB1800, SOCARB1801, SOCARB1802, SOCARB1803, SOCARB1804, SOCARB1805, SOCARB1806, SOLCAB1000, SOLCAB1001, SOLCAB1002, SOLCAB1003, SOLCAB2000, SOLCAB2001, SOLCAB2002, SOLCAB2003, SOLCAB2004, SOLCAB2005, SOLCAB2006, SOLCAB2007, SOLCAB2008, SOLCAB2009, SOLCAB3000, SOLCAB3001, SOLCAB5500, SOLCAB6000, SOLCAB6100, SOLCAB6500, SOLCAR1000, SOLCAR1001, SOLCAR1002, SOLCAR1003, SOLCAR1004, SOLCAR1005, SOLCAR1006, SOLCAR1007, SOLCAR1008, SOLCAR1009, SOLCAR1010, SOLCAR1011, SOLCAR1012, SOLCAR1013, SOLCAR1014, SOLCAR1015, SOLCAR1016, SOLCAR1017, SOLCAR1018, SOLCAR1019, SOLCAR1020, SOLCAR1021, SOLCAR1022, SOLCAR1023, SOLCAR1024, SOLCAR1025, SOLCAR1026, SOLCAR1027, SOLCAR1028, SOLCAR1029, SOLCAR1030, SOLCAR1031, SOLCAR1032, SOLCAR1033, SOLCAR1034, SOLCAR1040, SOLCAR1100, SOLCAR1107, SOLCAR1200, SOLCAR2000, SOLCAR2001, SOLCAR2002, SOLCAR2003, SOLCAR2004, SOLCAR2005, SOLCAR2006, SOLCAR2500, SOLCAR3000, SOLCAR3001, SOLCAR3002,
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SOLCAR3003, SOLCAR3010, SOLCAR3020, SOLCAR3500, SOLCAR4000, SOLCAR4001, SOLCAR5000, SOLCAR5001, SOLCAR5002, SOLCAR5003, SOLCAR5005, SOLCAR5006, SOLCAR5100, SOLCAR5500, SOLCAR5525, SOLCAR6000, SOLCAR6100, SOLCAR6900, SOLCAR7000, SOLCAR8000, SOLCAR8001, SOLCAR9000, SOLCAR9100, SOLCAR9500, SOLCAR9501, SOLCAR9502, SOLCAR9505

Revision

4

Revision Date

24 Jan 2017

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 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

TWA Time Weighted Average

ug/24H Micrograms per 24 Hours

UN United Nations

wt Weight