

## 1. IDENTIFICATION

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

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

<b>Dangerous Goods Classification</b>	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

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

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Sodium carbonate	NaCO3	497-19-8	<=100 %

### 4. FIRST AID MEASURES

#### Description of necessary measures according to routes of exposure

<b>Swallowed</b>	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.
<b>Eye</b>	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.
<b>Skin</b>	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.
<b>Inhaled</b>	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.
<b>Advice to Doctor</b>	Treat symptomatically.
<b>Medical Conditions Aggravated by Exposure</b>	No information available.

## 5. FIRE FIGHTING MEASURES

<b>General Measures</b>	If safe to do so, move undamaged containers from fire area. Cool containers with water spray until well after fire is out.
<b>Flammability Conditions</b>	Non-combustible; Material does not burn.
<b>Extinguishing Media</b>	If material is involved in a fire, use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
<b>Fire and Explosion Hazard</b>	Decomposes on heating, emitting toxic fumes.
<b>Hazardous Products of Combustion</b>	Fire or heat may produce irritating and/or toxic fumes, including oxides of Carbon.
<b>Special Fire Fighting Instructions</b>	Contain runoff from fire control water - Runoff may pollute waterways.
<b>Personal Protective Equipment</b>	Wear self-contained breathing apparatus (SCBA) in combination with normal firefighting clothing (full fire kit).
<b>Flash Point</b>	No Data Available
<b>Lower Explosion Limit</b>	No Data Available
<b>Upper Explosion Limit</b>	No Data Available
<b>Auto Ignition Temperature</b>	No Data Available
<b>Hazchem Code</b>	No Data Available

## 6. ACCIDENTAL RELEASE MEASURES

<b>General Response Procedure</b>	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.
<b>Clean Up Procedures</b>	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.
<b>Containment</b>	Stop leak if safe to do so – Prevent entry into waterways, drains or confined areas. Prevent dust cloud.
<b>Decontamination</b>	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).
<b>Environmental Precautionary Measures</b>	Prevent entry into soils, drains and waterways. Local authorities should be advised if significant spillages cannot be contained.
<b>Evacuation Criteria</b>	Spill or leak area should be isolated immediately. Keep unauthorised personnel away.
<b>Personal Precautionary Measures</b>	Use personal protective equipment as required (see SECTION 8).

## 7. HANDLING AND STORAGE

<b>Handling</b>	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<sup>3</sup> (measured as inhalable dust).  
- New Zealand WES (Particulates not otherwise classified): TWA = 10 mg/m<sup>3</sup> (total); TWA = 3 mg/m<sup>3</sup> (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<sup>3</sup> [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

<b>Octanol Water Coefficient</b>	No Data Available
<b>Particle Size</b>	<125 µm (80 - 90 %)
<b>Partition Coefficient</b>	No Data Available
<b>Saturated Vapour Concentration</b>	No Data Available
<b>Vapour Temperature</b>	No Data Available
<b>Viscosity</b>	No Data Available
<b>Volatile Percent</b>	No Data Available
<b>VOC Volume</b>	No Data Available
<b>Additional Characteristics</b>	pKa: 6.4 - 10.3
<b>Potential for Dust Explosion</b>	No information available.
<b>Fast or Intensely Burning Characteristics</b>	No information available.
<b>Flame Propagation or Burning Rate of Solid Materials</b>	No information available.
<b>Non-Flammables That Could Contribute Unusual Hazards to a Fire</b>	No information available.
<b>Properties That May Initiate or Contribute to Fire Intensity</b>	Non-combustible; Material does not burn.
<b>Reactions That Release Gases or Vapours</b>	Decomposes on heating, emitting toxic fumes, including Carbon oxides.
<b>Release of Invisible Flammable Vapours and Gases</b>	No information available.

## 10. STABILITY AND REACTIVITY

<b>General Information</b>	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.
<b>Chemical Stability</b>	Stable under recommended storage conditions.
<b>Conditions to Avoid</b>	Avoid dust formation. Avoid exposure to moisture.
<b>Materials to Avoid</b>	Incompatible/reactive with acids, magnesium, phosphorus pentoxide, fluorine, (finely divided) aluminium.
<b>Hazardous Decomposition Products</b>	Decomposes on heating, emitting toxic fumes, including Carbon oxides.
<b>Hazardous Polymerisation</b>	No information available.

## 11. TOXICOLOGICAL INFORMATION

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

## 12. ECOLOGICAL INFORMATION

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

## 13. DISPOSAL CONSIDERATIONS

<b>General Information</b>	If recycling is not practicable, dispose of product/packaging in accordance with local/regional/national regulations.
<b>Special Precautions for Land Fill</b>	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

<b>Proper Shipping Name</b>	Soda Ash, Light
<b>Class</b>	No Data Available
<b>Subsidiary Risk(s)</b>	No Data Available
<b>UN Number</b>	No Data Available
<b>Hazchem</b>	No Data Available
<b>Pack Group</b>	No Data Available
<b>Special Provision</b>	No Data Available

### Land Transport (Malaysia)

ADR Code

<b>Proper Shipping Name</b>	Soda ash, Light
<b>Class</b>	No Data Available
<b>Subsidiary Risk(s)</b>	No Data Available
<b>UN Number</b>	No Data Available
<b>Hazchem</b>	No Data Available
<b>Pack Group</b>	No Data Available
<b>Special Provision</b>	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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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

### Environmental Protection Authority (New Zealand)

Hazardous Substances and New Organisms Amendment Act 2015

**Approval Code** HSR003265

### National/Regional Inventories

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



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)

**cm<sup>2</sup>** Square Centimetres

**CO<sub>2</sub>** 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/cm<sup>3</sup>** 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

**inH<sub>2</sub>O** Inch of Water

**K** Kelvin

**kg** Kilogram

**kg/m<sup>3</sup>** Kilograms per Cubic Metre

**lb** Pound

**LC<sub>50</sub>** LC stands for lethal concentration. LC<sub>50</sub> 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.

**LD<sub>50</sub>** LD stands for Lethal Dose. LD<sub>50</sub> 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

**m<sup>3</sup>** Cubic Metre

**mbar** Millibar

**mg** Milligram

**mg/24H** Milligrams per 24 Hours

**mg/kg** Milligrams per Kilogram

**mg/m<sup>3</sup>** Milligrams per Cubic Metre

**Misc** or **Miscible** Liquids form one homogeneous liquid phase regardless of the amount of either component present.

**mm** Millimetre

**mmH<sub>2</sub>O** 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

**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