

1. IDENTIFICATION

Product Name	Sodium Percarbonate (PG-II)
Other Names	Disodium carbonate, compound with hydrogen peroxide (2:3); Sodium carbonate, peroxide; Sodium carbonate, peroxyhydrate; Sodium Percarbonate Coated
Uses	Bleaching/cleaning agent; Manufacture of cleaning/washing agents and additives.
Chemical Family	No Data Available
Chemical Formula	2Na ₂ CO ₃ ·3H ₂ O ₂
Chemical Name	Carbonic acid, disodium salt, compound with hydrogen peroxide (2:3)
Product Description	No Data Available

Contact Details of the Supplier of this Safety Data Sheet

Organisation	Location	Telephone
Redox Ltd	2 Swettenham Road Minto NSW 2566 Australia	+61-2-97333000
Redox 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) Schedule 6

Globally Harmonised System

Hazard Classification Hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS)

Hazard Categories Oxidising Solids - Category 2
Acute Toxicity (Oral) - Category 4
Serious Eye Damage/Irritation - Category 1

Pictograms



Signal Word Danger

Hazard Statements

H272 May intensify fire; oxidizer.
H302 Harmful if swallowed.
H318 Causes serious eye damage.

Precautionary Statements

Prevention	P210	Keep away from heat.
	P221	Take any precaution to avoid mixing with combustibles/organic material.
	P280	Wear protective gloves/eye protection/face protection.
	P270	Do not eat, drink or smoke when using this product.
	P370 + P378	In case of fire: Use water for extinction.
Response	P305 + P351 + P338 + P310	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE/doctor.
	P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.
	P330	Rinse mouth.
Disposal	P501	Dispose of contents/container in accordance with local / regional / national / international regulations.

National Transport Commission (Australia)

Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Dangerous Goods Classification Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Environmental Protection Authority (New Zealand)

Hazardous Substances and New Organisms Amendment Act 2015

HSNO Classifications	Physical Hazards	5.1.1B	Oxidising substances that are liquids or solids: medium hazard
	Health Hazards	6.1D	Substances that are acutely toxic - Harmful
		6.4A	Substances that are irritating to the eye
Environmental Hazards	9.1D	Substances that are slightly harmful to the aquatic environment or are otherwise designed for biocidal action	
	9.3C	Substances that are harmful to terrestrial vertebrates	

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Sodium percarbonate	2Na ₂ CO ₃ ·3H ₂ O ₂	15630-89-4	85 - 100 %
Sodium carbonate	Na ₂ CO ₃	497-19-8	5 - 10 %
Sodium chloride	NaCl	7647-14-5	0 - 5 %
Ingredients determined not to be hazardous	Unspecified	Unspecified	Balance %

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 for advice. Never give anything by mouth to an unconscious person.
Eye	IF IN EYES: Immediately flush eyes with running water continuously for several minutes, holding eyelids open and occasionally lifting the upper and lower lids. Immediately call a Poison Centre or doctor/physician for advice. Remove contact lenses if present and easy to do. Continue flushing until advised to stop by a Poisons Information Centre or a doctor, or for at least 15 minutes. Consult with an ophthalmologist in all cases.
Skin	IF ON SKIN (or hair): Remove contaminated clothing and shoes immediately. Flush skin and hair with running water for at least 15 minutes. 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. 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 and supportively. Keep victim calm and warm - Obtain immediate medical care. Ensure that attending medical personnel are aware of identity and nature of the product(s) involved, and take precautions to protect themselves.
Medical Conditions Aggravated by Exposure	Persons with pre-existing skin, eye or respiratory disease may be at increased risk from the irritant properties of this material.

5. FIRE FIGHTING MEASURES

General Measures	If safe to do so, move undamaged containers from fire area. Do not move cargo if cargo has been exposed to heat. Large fire: Flood fire area with water from a protected position. Cool containers with flooding quantities of water until well after fire is out - If impossible, withdraw from area and let fire burn. Avoid getting water inside containers, a violent reaction may occur. Dam fire control water for later disposal. ALWAYS stay away from tank ends.
Flammability Conditions	OXIDISING SUBSTANCE: Will accelerate burning when involved in a fire.
Extinguishing Media	If material is involved in a fire, use flooding quantities of water for extinction - Do not use dry chemicals, Carbon dioxide (CO ₂) or foam.
Fire and Explosion Hazard	Risk of violent reaction or explosion: May explode from heating, shock, friction or contamination. May ignite combustibles. Containers may explode when heated. Runoff may create fire or explosion hazard.
Hazardous Products of Combustion	Fire may produce irritating, toxic and/or corrosive gases, including Carbon monoxide, Carbon dioxide, Sodium oxides.
Special Fire Fighting Instructions	Contain runoff from fire control or dilution water - Runoff may pollute waterways; Runoff may create fire or explosion hazard.
Personal Protective Equipment	Wear self-contained breathing apparatus (SCBA) and chemical splash suit. Structural firefighter's uniform will provide limited protection.
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	1Y

6. ACCIDENTAL RELEASE MEASURES

General Response Procedure	Ensure adequate ventilation. Prevent exposure to heat. ELIMINATE all ignition sources. Do not contaminate - Keep combustibles away from spilled material. Do not touch or walk through spilled material. Avoid generating dust. Avoid breathing dust and contact with eyes, skin and clothing.
Clean Up Procedures	Use clean, non-sparking tools to transfer material to a clean, dry plastic container for disposal (see SECTION 13). Move container from spill area.
Containment	Stop leak if safe to do so - Prevent entry into waterways, drains or confined areas. Use water spray to knock down vapours or divert vapour clouds.
Decontamination	Flush area with water.
Environmental Precautionary Measures	Spillages and decontamination runoff should be prevented from entering drains and watercourses.
Evacuation Criteria	Spill or leak area should be isolated immediately. Keep unauthorised personnel away. Keep upwind and to higher ground. Large spill: Immediately contact Police or Fire Brigade; Consider initial downwind evacuation of areas within at least 100 m.
Personal Precautionary Measures	Do not touch damaged containers or spilled material unless wearing appropriate protective clothing (see SECTION 8). Large spill: Wear SCBA and chemical splash suit.

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 formation of dust and aerosols. Avoid breathing dust/aerosols and contact with eyes, skin and clothing. Do not ingest. Wear protective gloves/eye protection/face protection (see SECTION 8). OXIDISING SUBSTANCE: Prevent exposure to heat and sources of ignition - No smoking. Do not contaminate - Take any precaution to avoid mixing with combustibles/organic materials.
Storage	Store in a cool, dry and well-ventilated place, out of direct sunlight. Keep container tightly closed. Keep away from heat and sources of ignition - No smoking. Keep/store away from combustibles and incompatible materials (see SECTION 10).
Container	Keep in the original container.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General	There are no known exposure limits 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 ; TWA = 3 mg/m ³ (respirable dust).
Exposure Limits	No Data Available
Biological Limits	No information available.
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.
Personal Protection Equipment	- Respiratory protection: In case of inadequate ventilation, wear respiratory protection. Recommended: Dust mask/particulate filter respirator (refer to AS/NZS 1715 & 1716). - Eye/face protection: Wear appropriate eye protection to prevent eye contact. Recommended: Chemical goggles. - Hand protection: Wear protective gloves. Recommended: Permeation resistant gloves, e.g. PVC, 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 hands before breaks and at the end of workday. Remove contaminated clothing and shoes immediately and wash before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solid
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Appearance	Crystalline powder or granules
Odour	Odourless
Colour	White
pH	10 - 11 (3% soln.)
Vapour Pressure	<10-3 Pa (@ 25 °C)
Relative Vapour Density	No Data Available
Boiling Point	Decomposes when heated
Melting Point	Decomposes when heated
Freezing Point	No Data Available
Solubility	140 g/l in water 24°C
Specific Gravity	0.8 - 1.0
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
Decomposition Temperature	>50 °C
Density	0.8 - 1.0 g/cm ³
Specific Heat	No Data Available
Molecular Weight	314.02 g/mol
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 information available.
Potential for Dust Explosion	No information available.
Fast or Intensely Burning Characteristics	May explode from heating, shock, friction or contamination.
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	OXIDISING SUBSTANCE: Will accelerate burning when involved in a fire. May ignite combustibles.
Reactions That Release Gases or Vapours	Thermal decomposition may produce irritating, toxic and/or corrosive gases, including Carbon monoxide, Carbon dioxide, Sodium oxides.
Release of Invisible Flammable Vapours and Gases	No information available.

10. STABILITY AND REACTIVITY

General Information	OXIDISER: May intensify fire; will react with reducing agents and organic compounds to produce heat and could potentially catch fire. Sodium percarbonate in water rapidly dissociates into hydrogen peroxide and sodium carbonate.
Chemical Stability	Stable under normal temperature conditions and recommended use.

Conditions to Avoid	Prevent exposure to heat and sources of ignition. Do not contaminate. Protect from moisture.
Materials to Avoid	Incompatible/reactive with water, acids, reducing agents, combustible/organic materials, powdered metals.
Hazardous Decomposition Products	Thermal decomposition may produce irritating, toxic and/or corrosive gases, including Carbon monoxide, Carbon dioxide, Sodium oxides.
Hazardous Polymerisation	Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

General Information	<ul style="list-style-type: none"> - Acute toxicity: Harmful if swallowed. Causes severe irritation of the mouth, throat, esophagus and stomach; bloating of stomach, belching, nausea, vomiting and diarrhoea. - Skin corrosion/irritation: May cause skin irritation with prolonged contact. - Eye damage/irritation: Causes serious eye damage. Causes severe eye irritation, watering and redness; can cause burns to the eye with risk of serious or permanent eye lesions. - Respiratory/skin sensitisation: The available data indicate that sodium percarbonate is not a skin sensitiser [NICNAS]. - Germ cell mutagenicity: Sodium percarbonate is not expected to have genotoxic potential [NICNAS]. - Carcinogenicity: Sodium percarbonate is not expected to have a carcinogenic potential [NICNAS]. - Reproductive toxicity: Sodium percarbonate is not expected to have a toxic potential for reproduction or foetus development [NICNAS]. - STOT (single exposure): May cause slight nose and throat irritation; at high concentrations, respiratory tract irritation (mucous membranes), cough. In case of repeated or prolonged exposure, risk of sore throat, nose bleeds, chronic bronchitis. - STOT (repeated exposure): No information available. - Aspiration toxicity: No information available.
Acute	
Ingestion	<p>Acute toxicity (Oral): COMPONENT: Sodium percarbonate (CAS No. 15630-89-4): - LD50, Rat: 1.034 mg/kg bw. [NICNAS].</p>
Carcinogen Category	None

12. ECOLOGICAL INFORMATION

Ecotoxicity	<p>Aquatic toxicity: COMPONENT: Sodium percarbonate (CAS No. 15630-89-4): - LC50, Fish (Pimephales promelas): 70.7 mg/l (96 h) [Supplier's SDS]. - EC50, Crustacea (Daphnia pulex): 4.9 mg/l (48 h) [Supplier's SDS].</p>
Persistence/Degradability	Sodium percarbonate dissociates in water into hydrogen peroxide and sodium carbonate.
Mobility	Volatilisation of hydrogen peroxide from surface waters and moist soil is expected to be very low, while it is expected to be highly mobile in soil.
Environmental Fate	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
Bioaccumulation Potential	Both sodium carbonate and hydrogen peroxide are inorganic chemicals which do not bioaccumulate.
Environmental Impact	No Data Available

13. DISPOSAL CONSIDERATIONS

General Information	Dispose of contents/container via a licensed professional waste disposal service and in accordance with local/regional/national regulations.
Special Precautions for Land Fill	Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

14. TRANSPORT INFORMATION

Land Transport (Australia)

ADG Code

Proper Shipping Name	SODIUM CARBONATE PEROXYHYDRATE
Class	5.1 Oxidising Substances
Subsidiary Risk(s)	No Data Available
EPG	31 Oxidizing Substances
UN Number	3378
Hazchem	1Y
Pack Group	II
Special Provision	No Data Available

Land Transport (Malaysia)

ADR Code

Proper Shipping Name	SODIUM CARBONATE PEROXYHYDRATE
Class	5.1 Oxidising Substances
Subsidiary Risk(s)	No Data Available
EPG	31 Oxidizing Substances
UN Number	3378
Hazchem	1Y
Pack Group	II
Special Provision	No Data Available

Land Transport (New Zealand)

NZS5433

Proper Shipping Name	SODIUM CARBONATE PEROXYHYDRATE
Class	5.1 Oxidising Substances
Subsidiary Risk(s)	No Data Available
EPG	31 Oxidizing Substances
UN Number	3378
Hazchem	1Y
Pack Group	II
Special Provision	No Data Available

Land Transport (United States of America)

US DOT

Proper Shipping Name	SODIUM CARBONATE PEROXYHYDRATE
Class	5.1 Oxidising Substances
Subsidiary Risk(s)	No Data Available
ERG	140 Oxidizers
UN Number	3378
Hazchem	1Y
Pack Group	II
Special Provision	No Data Available

Sea Transport

IMDG Code

Proper Shipping Name	SODIUM CARBONATE PEROXYHYDRATE
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Class	5.1 Oxidising Substances
Subsidiary Risk(s)	No Data Available
UN Number	3378
Hazchem	1Y
Pack Group	II
Special Provision	No Data Available
EMS	F-A, S-Q
Marine Pollutant	No

Air Transport

IATA DGR

Proper Shipping Name	SODIUM CARBONATE PEROXYHYDRATE
Class	5.1 Oxidising Substances
Subsidiary Risk(s)	No Data Available
UN Number	3378
Hazchem	1Y
Pack Group	II
Special Provision	No Data Available

National Transport Commission (Australia)

Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Dangerous Goods Classification	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)	Schedule 6

Environmental Protection Authority (New Zealand)

Hazardous Substances and New Organisms Amendment Act 2015

Approval Code	HSR001351
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National/Regional Inventories

Australia (AIC)	Listed
Canada (DSL)	Listed
Canada (NDSL)	Not Determined
China (IECSC)	Listed
Europe (EINECS)	239-707-6
Europe (REACH)	Not Determined
Japan (ENCS/METI)	Listed

Korea (KECI)	Listed
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)	Listed

16. OTHER INFORMATION

Related Product Codes	SOPERC1000, SOPERC1001, SOPERC1002, SOPERC1003, SOPERC1004, SOPERC1005, SOPERC1006, SOPERC1007, SOPERC1008, SOPERC1009, SOPERC1010, SOPERC1011, SOPERC1012, SOPERC1013, SOPERC1014, SOPERC1500, SOPERC1800, SOPERC1801, SOPERC1802, SOPERC1803, SOPERC1804, SOPERC1805, SOPERC2000, SOPERC2001, SOPERC2002, SOPERC2003, SOPERC2004, SOPERC2005, SOPERC2006, SOPERC2007, SOPERC2008, SOPERC2100, SOPERC2500, SOPERC3000, SOPERC3500, SOPERC3600, SOPERC4000, SOPERC4200, SOPERC4250, SOPERC4300, SOPERC4301, SOPERC4305, SOPERC4400, SOPERC4401, SOPERC4402, SOPERC4403, SOPERC4404, SOPERC4405, SOPERC4406, SOPERC4407, SOPERC4408, SOPERC4410, SOPERC4450, SOPERC4500, SOPERC4600, SOPERC5000, SOPERC5700, SOPERC6000, SOPERC6001, SOPERC6100, SOPERC6101, SOPERC6200, SOPERC6201, SOPERC6300, SOPERC6350, SOPERC6500, SOPERC6501, SOPERC6600, SOPERC6601, SOPERC6700, SOPERC6701, SOPERC6702, SOPERC6800, SOPERC6900, SOPERC7000, SOPERC7100, SOPERC7200, SOPERC7500, SOPERC8000, SOPERC8500, SOPERC9000, SOPERC9300, SOPERC9500
Revision	4
Revision Date	12 Jun 2019
Reason for Issue	Update SDS
Key/Legend	<p>< 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 Fahrenheit 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 insoluble 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</p>

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

tn Tonne

TWA Time Weighted Average

ug/24H Micrograms per 24 Hours

UN United Nations

wt Weight