

1. IDENTIFICATION

Product Name	Potassium Carbonate
Other Names	Carbonic Acid, Dipotassium Salt; Pearl Ash; Potash; Potassium Carbonate.
Uses	Optical glass materials. Dyeing Tannage Photos Analytical reagents Ingredients for pharmaceuticals
Chemical Family	No Data Available
Chemical Formula	K ₂ CO ₃
Chemical Name	Potassium Carbonate
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.	2132A E. Dominguez Street Carson CA 90810 USA	+1-424-675-3200
Redox Chemicals Sdn Bhd	No. 8, Block G, Ground Floor, Taipan 2 Jalan PJU 1A/3 Ara Damansara 47301, Petaling Jaya, Selangor, Malaysia	+60-3-7843-6833

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

2. HAZARD IDENTIFICATION

+1-703-527-3887

Poisons Schedule (Aust) 5

Globally Harmonised System

Hazard Classification

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

Hazard Categories

Skin Corrosion/Irritation - Category 2
 Specific Target Organ Toxicity (Single Exposure) - Category 3
 Serious Eye Damage/Irritation - Category 2A

Pictograms



Signal Word

Warning

Hazard Statements

H336 May cause drowsiness or dizziness.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.

Precautionary Statements

Prevention	<p>P264 Wash contacted areas thoroughly after handling. P280 Wear protective gloves/protective clothing/eye protection/face protection. P261 Avoid breathing dust/fume/gas/mist/vapours/spray. P271 Use only outdoors or in a well-ventilated area.</p>
Response	<p>P312 Call a POISON CENTER or doctor/physician if you feel unwell. P362 Take off contaminated clothing and wash before reuse. P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P332 + P313 If skin irritation occurs: Get medical advice/attention. P337 + P313 If eye irritation persists: Get medical advice/attention. P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p>
Storage	<p>P405 Store locked up. P403 + P233 Store in a well-ventilated place. Keep container tightly closed.</p>
Disposal	<p>P501 Dispose of contents/container in accordance with local / regional / national / international regulations.</p>

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)

Environmental Protection Authority (New Zealand)

Hazardous Substances and New Organisms Amendment Act 2015

HSNO Classifications

Health Hazards	<p>6.1D Substances that are acutely toxic - Harmful 6.3A Substances that are irritating to the skin 6.4A Substances that are irritating to the eye</p>
Environmental Hazards	<p>9.3B Substances that are ecotoxic to terrestrial vertebrates</p>

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Potassium Carbonate	No Data Available	584-08-7	99.50 %

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 immediately
Eye	Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Take care not to rinse contaminated water into the non-affected eye. Seek immediate medical attention.
Skin	Remove contaminated clothing. Wash affected area with plenty of soap and water for at least 15 minutes. If irritation develops seek medical attention. Wash clothing before reuse.
Inhaled	Remove victim from exposure to fresh air. If not breathing, apply artificial respiration. If breathing is difficult, give oxygen through a face mask. Seek medical attention.
Advice to Doctor	Treat symptomatically based on individual reactions of patient and judgement of doctor.
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	Extinguishing media : Dry chemical powder, CO2, Water, foam. If large fire, use regular extinguishing media or flood with fine water spray. Unsuitable extinguishing media : Do not use water-jet.
Fire and Explosion Hazard	Containers may rupture or explode if exposed to fire.
Hazardous Products of Combustion	Substance does not burn, but decomposition upon heating may cause corrosive / toxic fumes. Thermal decomposition may produce gas and / or fumes of carbon dioxide, carbon monoxide, potassium oxide.
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. May be 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. Transfer to a suitable, labelled container and dispose of promptly as hazardous waste.
Containment	Stop leak if safe to do so. Isolate the danger area.
Decontamination	Wash area down with excess water. Do NOT let product reach drains or waterways. If product does enter a waterway, advise the Environmental

Environmental Precautionary Measures	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 with soap and water. Take precautionary measures against static discharges by bonding and grounding equipment. Avoid contact with eyes, skin and clothing. Do not inhale product dust/fumes. When handling do not eat, drink or smoke.
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 Australian Safety and Compensation Council (ASCC). However, the exposure standard for dust not otherwise specified is 10mg/m ³ (for inspirable dust) and 3mg/m ³ (for respirable dust). 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. Keep the floors clean to prevent slipping and to keep the concentration of dust in air within exposure limits.
Personal Protection Equipment	RESPIRATOR: Wear an approved particulate respirator when handling this product (AS1715/1716). EYES: Safety goggles with secondary protection eye shield (AS1336/1337). HANDS: Chemical resistant gloves (AS2161). CLOTHING: Long-sleeved protective coveralls and safety footwear (AS3765/2210)
Work Hygienic Practices	Eating, drinking and smoking in areas where the material is handled, stored and processed should be forbidden. Wash hands before breaks and after work

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solid
Appearance	Granular Powder
Odour	Odourless
Colour	Colourless or White
pH	11 0.02 M Solution
Vapour Pressure	No Data Available
Relative Vapour Density	No Data Available
Boiling Point	234 °C
Melting Point	891 °C
Freezing Point	-15 °C
Solubility	Soluble

Specific Gravity	No Data Available
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	No Data Available
Density	2.428 Relative (Water = 1)
Specific Heat	No Data Available
Molecular Weight	138.21
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	Fire risk can be ignored but Containers may rupture or explode if exposed.
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

General Information	Hygroscopic solid.
Chemical Stability	Product is stable under normal conditions of use, storage and temperature.
Conditions to Avoid	Heat, flame, sparks and sources of ignition.
Materials to Avoid	Avoid contact with oxidants (acids, nitrates, chlorine bleach). Reacts with aluminium, fluoro, magnesium, silicon, chlorine trifluoride, powdered metals. Powder metal should be avoided.
Hazardous Decomposition Products	Substance does not burn, but decomposition upon heating may cause corrosive / toxic fumes. Thermal decomposition may produce gas and / or fumes of carbon dioxide, carbon monoxide, potassium oxide.
Hazardous Polymerisation	Hazardous Polymerisation will not occur.

11. TOXICOLOGICAL INFORMATION

General Information	Oral LD50 Rat: > 2000 mg/kg bw
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Skin corrosion / irritation: irritation is observed.
 Serious eye damage / irritation: irritation is observed.

Germ cell mutagenicity:
 Ames test: Negative
 Gene mutation (mammalian cell gene mutation assay): Negative
 Chromosome aberration (mammalian chromosome aberration test): Negative

Specific target organ toxicity (single exposure): May cause respiratory irritation.
 Specific target organ toxicity (repeated exposure): No adverse effects are observed in the repeated exposure study using rodents.

Skin/Irritant	Irritating to skin. May cause irritation and caustic effect, analogous to potassium hydroxide.
Ingestion	Ingestion may cause nausea, vomiting and stomach and severe digestive system irritation and burns.
Eye/Irritant	Irritating to eyes. May cause irritation and caustic effect, is analogous to potassium hydroxide.
Inhalation	Irritating to respiratory system. May cause effect of long term exposure to dust of high concentrations.
Carcinogen Category	No Data Available

12. ECOLOGICAL INFORMATION

Ecotoxicity	Fish : LC50=68mg/L, 96hr, <i>Oncorhynchus mykiss</i> Daphnia magna : EC50=430mg/L, 48hr, <i>Daphnia magna</i> (non-GLP)
Persistence/Degradability	No information available on persistence/degradability for this product.
Mobility	Soluble in water.
Environmental Fate	Avoid contaminating 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.
Special Precautions for Land Fill	Contact a specialist disposal company or the local waste regulator for advice.

14. TRANSPORT INFORMATION

Land Transport (Australia)

ADG Code

Proper Shipping Name	Potassium Carbonate
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 (Malaysia)

ADR Code

Proper Shipping Name	Potassium Carbonate
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 (New Zealand)

NZS5433

Proper Shipping Name	Potassium Carbonate
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	Potassium Carbonate
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	Potassium Carbonate
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

Proper Shipping Name	Potassium Carbonate
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)

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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15. REGULATORY INFORMATION

General Information	No Data Available
Poisons Schedule (Aust)	5

Environmental Protection Authority (New Zealand)

Hazardous Substances and New Organisms Amendment Act 2015

Approval Code	HSR003274
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National/Regional Inventories

Australia (AICS)	Listed
Canada (DSL)	Not Determined
Canada (NDSL)	Not Determined
China (IECSC)	Not Determined
Europe (EINECS)	209-529-3
Europe (REACH)	Not Determined
Japan (ENCS/METI)	Not Determined
Korea (KECI)	TS7750000
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

POCARB1000, POCARB1001, POCARB1002, POCARB1003, POCARB1004, POCARB1005, POCARB1006, POCARB1007, POCARB1008, POCARB1009, POCARB1010, POCARB1011, POCARB1012, POCARB1013, POCARB1014, POCARB1015, POCARB1016, POCARB1017, POCARB1018, POCARB1500, POCARB1501, POCARB1600, POCARB1601, POCARB2000, POCARB2001, POCARB2002, POCARB2003, POCARB2004, POCARB2005, POCARB2006, POCARB2007, POCARB2008, POCARB2009, POCARB2010, POCARB2011, POCARB2012, POCARB2013, POCARB2014, POCARB2015, POCARB2016, POCARB2017, POCARB2018, POCARB2019, POCARB2020, POCARB2200, POCARB2201, POCARB2202, POCARB2203, POCARB2204, POCARB2205, POCARB2206, POCARB2207, POCARB2208, POCARB2209, POCARB2210, POCARB2211, POCARB2212, POCARB2213, POCARB2214, POCARB2500, POCARB3000, POCARB3001, POCARB3100, POCARB3400, POCARB3500, POCARB3600, POCARB3800, POCARB3900, POCARB4000, POCARB4001, POCARB4002, POCARB4003, POCARB4004, POCARB4005, POCARB4006, POCARB4007, POCARB4008, POCARB4009, POCARB4010, POCARB4011, POCARB4012, POCARB4013, POCARB4100, POCARB4200, POCARB4201, POCARB4300, POCARB4301, POCARB4400, POCARB4500, POCARB4600, POCARB4700, POCARB4800, POCARB5000, POCARB5500, POCARB5501, POCARB6000, POCARB7000, POCARB7001, POCARB7500, POCARB8000, POCARB8200, POCARB9000, POCARB9100, POCARB9500, POCARB1019, POCARB4014, POCARB1803, POCARB1804, POCARB1805, POCARB1806, POCARB1807, POCARB1808, POCARB1809, POCARB1810, POCARB1811, POCARB1812, POCARB1813, POCARB1814, POCARB1815, POCARB1816, POCARB1817, POCARB1818, POCARB4015, POCARB1400, POCARB4050, POCARB4120, POCARB4150, POCARB4121, POCARB4020, POCARB1350, POCARB1360, POCARB4016, POCARB4110

Revision

3

Revision Date

28 May 2015

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 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**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