

Safety Data Sheet Potassium Bicarbonate Revision 2, Date 04 Jul 2014

1. IDENTIFICATION

Product Name Potassium Bicarbonate

Other Names Carbonic Acid, Monopotassium Salt; Potassium Acid Carbonate; Potassium Hydrogen Carbonate

Uses No Data Available **Chemical Family** No Data Available

Chemical Formula KHCO3

Chemical Name Potassium Bicarbonate **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	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

No Data Available Poisons Schedule (Aust)

Globally Harmonised System

Hazard Classification NOT hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS)

Sydney



Signal Word None

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)

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Potassium Bicarbonate	KHCO3	298-14-6	95.00 - 100.00 %

4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure

SwallowedRinse mouth with water. Give plenty of water to drink provided victim is conscious. Never give anything by mouth to

an unconscious person. Do NOT induce vomiting. If large amounts were swallowed, get medical advice. Seek medical

attention if symptoms appear.

Eye Immediately flush eyes with plenty of water for 15 minutes, holding eyelids open. In all cases of eye contamination, it

is a sensible precaution to seek medical advice.

Skin Remove contaminated clothing. Wash affected area with soap and plenty of water. If irritation develops, seek medical

attention.

Inhaled Remove victim from exposure to fresh air. If not breathing, apply artificial respiration. If breathing is difficult, give

oxygen. Seek medical attention if effects persist.

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 which are aggravated from 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. Water spray may be

used to extinguish fires and cool fire exposed containers.

Fire and Explosion Hazard Not considered to be a fire and explosion hazard. Non-Combustible.

Hazardous Products of

Combustion

When involved in a fire, this product may generate oxides of carbon and the contained metal.

Special Fire FightingDo NOT allow fire fighting water to reach waterways, drains or sewers. Store fire fighting water for treatment. **Instructions**

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 PointNo Data AvailableLower Explosion LimitNo Data AvailableUpper Explosion LimitNo Data AvailableAuto Ignition TemperatureNo Data Available

No Data Available **Hazchem Code**

6. ACCIDENTAL RELEASE MEASURES

Avoid accidents, clean up immediately. Eliminate all sources of ignition. Increase ventilation. Avoid generating dust. **General Response Procedure**

Stop leak if safe to do so. Isolate the danger area. Use clean, non-sparking tools and equipment. Reduce airborne

Do NOT let product reach drains or waterways. If product does enter a waterway, advise the Environmental

dust and prevent scattering by moistening with water.

Clean Up Procedures Clean up spills in a manner that does not disperse dust into the air. Contain and sweep/shovel up spills with dust

binding material. Transfer to a suitable, labelled container and dispose of promptly.

Containment Stop leak if safe to do so. Isolate the danger area.

Environmental Precautionary

Measures

Protection Authority or your local Waste Management.

Evacuate all unnecessary personnel.

Personal Precautionary

Evacuation Criteria

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. 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/m3 (for inspirable dust) and

3mg/m3 (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.

RESPIRATOR: For conditions of use where exposure to dust or mist is apparent and engineering controls are not **Personal Protection Equipment**

feasible, a particulate respirator (NIOSH type N95 or better filters) may be worn. If oil particles (e.g. lubricants, cutting fluids, glycerine, etc.) are present, use a NIOSH type R or P filter For emergencies or instances where the exposure levels are not known, use a full-face positive-pressure, air-supplied respirator' WARNING: Air-purifying respirators do

not protect workers in oxygen deficient atmospheres (AS1715/1716).

EYES: Use chemical safety goggles (AS1336/1337).

HANDS: Wear protective gloves (AS2161).

CLOTHING: Long-sleeved protective clothing and safety footwear (AS3765/2210).

Work Hygienic Practices No Data Available

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State Solid

Appearance Crystalline Powder

Odour Odourless Colour White

pН 8 - 9 Moderately Alkali **Vapour Pressure** No Data Available **Relative Vapour Density** No Data Available **Boiling Point** No Data Available **Melting Point** No Data Available **Freezing Point** No Data Available Solubility 36 g/100 g of water

Specific Gravity

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** 100 - 120 °C No Data Available **Density** 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 0%

VOC Volume No Data Available **Additional Characteristics** No Data Available **Potential for Dust Explosion** No Data Available **Fast or Intensely Burning** No Data Available

Characteristics

Flame Propagation or Burning

Rate of Solid Materials

Non-Flammables That Could No Data Available Contribute Unusual Hazards to a

Properties That May Initiate or

Contribute to Fire Intensity

Reactions That Release Gases

or Vapours

Release of Invisible Flammable Vapours and Gases

No Data Available

No Data Available

No Data Available

No Data Available

10. STABILITY AND REACTIVITY

Product is stable under normal conditions of use, storage and temperature.

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Chemical Stability

Conditions to Avoid Heat, flame, moisture and incompatibles.

Materials to Avoid Potassium carbonyl, magnesium, chlorine trifluoride listed for the carbonate.

Hazardous Decomposition

Products

May produce oxides of carbon and the contained metal.

Hazardous Polymerisation Hazardous Polymerisation will not occur.

11. TOXICOLOGICAL INFORMATION

General Information No LD50 information found relating to normal routes of occupational exposure.

Eyelrritant Eye contact may cause irritation, redness, and pain.

Ingestion May be harmful if swallowed. Large doses may produce abdominal pain, nausea, and vomiting.

Inhalation May cause irritation to the respiratory tract. Symptoms may include coughing, sore throat, labored breathing, and

chest pain

SkinIrritant May cause skin irritation with redness and pain.

Carcinogen Category No Data Available

12. ECOLOGICAL INFORMATION

Ecotoxicity No ecological information available for this product.

Persistence/DegradabilityNo information available on persistence/degradability for this product.

MobilityNo information available on mobility for this product.Environmental FateAvoid contaminating waterways, drains or sewers.

Bioaccumulation PotentialNo 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. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings

and precautions listed for the product.

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 BICARBONATE

Class No Data Available
Subsidiary Risk(s) No Data Available

No Data Available

UN NumberNo Data AvailableHazchemNo Data AvailablePack GroupNo Data AvailableSpecial ProvisionNo Data Available

Land Transport (Malaysia)

ADR

Proper Shipping Name POTASSIUM BICARBONATE

Class
No Data Available
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 BICARBONATE

Class No Data Available
Subsidiary Risk(s) No Data Available
No Data Available

UN NumberNo Data AvailableHazchemNo Data AvailablePack GroupNo Data AvailableSpecial ProvisionNo Data Available

Land Transport (United States of America)

US DOT

Proper Shipping Name POTASSIUM BICARBONATE

Class
No Data Available
Subsidiary Risk(s)
No Data Available
No Data Available
UN Number
No Data Available
Hazchem
No Data Available

Pack GroupNo Data AvailableSpecial ProvisionNo Data Available

Sea Transport

IMDG Code

Proper Shipping Name POTASSIUM BICARBONATE

ClassNo Data AvailableSubsidiary Risk(s)No Data AvailableUN NumberNo Data AvailableHazchemNo Data AvailablePack GroupNo Data AvailableSpecial ProvisionNo Data AvailableEMSNo Data Available

Marine Pollutant No

Air Transport

IATA DGR

Proper Shipping Name POTASSIUM BICARBONATE

ClassNo Data AvailableSubsidiary Risk(s)No Data AvailableUN NumberNo Data AvailableHazchemNo Data AvailablePack GroupNo Data AvailableSpecial ProvisionNo Data Available

National Transport Commission (Australia)

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15. REGULATORY INFORMATION

General InformationNo Data AvailablePoisons Schedule (Aust)No Data Available

Environmental Protection Authority (New Zealand)

Hazardous Substances and New Organisms Amendment Act 2015

Approval Code Not Hazardous

National/Regional Inventories

Australia (AICS) Listed

Canada (DSL) Not Determined

Canada (NDSL) Not Determined

China (IECSC) Not Determined

Europe (EINECS) Not Determined

Europe (REACh) Not Determined

Japan (ENCS/METI) Not Determined

Korea (KECI) Not Determined

Malaysia (EHS Register) Not Determined

New Zealand (NZIoC) Not Determined

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 POBICA1000, POBICA1001, POBICA1002, POBICA1003, POBICA1004, POBICA1005, POBICA1006,

POBICA1007, POBICA1008, POBICA1009, POBICA1010, POBICA1011, POBICA1012, POBICA2000, POBICA2100, POBICA2200, POBICA2300, POBICA2400, POBICA2500, POBICA2600, POBICA2700, POBICA2800, POBICA2900, POBICA3000, POBICA4000, POBICA4100, POBICA5000, POBICA5100, POBICA6000, POBICA1800, POBICA1801, POBICA1802, POBICA1013, POBICA1500, POBICA1700, POBICA1900, POBICA1950, POBICA1570, POBICA1575, POBICA1580, POBICA1770, POBICA1775,

POBICA1910, POBICA1710, POBICA1715

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Key/Legend < Less Than

> Greater Than

AICS Australian Inventory of Chemical Substances

atm Atmosphere

CAS Chemical Abstracts Service (Registry Number)

cm² Square CentimetresCO2 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/I 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 MercuryinH2O Inch of WaterK 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.

Itr 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

mmH20 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

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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