



SAFETY DATA SHEET POTASSIUM CHLORIDE REVISION 4, DATE 13 MAR 19

1. IDENTIFICATION

Product Name	Potassium chloride
Other Names	No Data Available
Uses	Suitable for use in all food industries and pharmaceutical industry.
Chemical Family	No Data Available
Chemical Formula	KCl
Chemical Name	Potassium chloride
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)

Not Scheduled



Globally Harmonised System

Hazard Classification	NOT hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS)
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)
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3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Potassium chloride	KCl	7447-40-7	>=96 - 100 %

4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure

Swallowed	IF SWALLOWED: Rinse mouth, then drink plenty of water. Get medical advice/attention 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 for at least 15 minutes. If eye irritation persists, get medical advice/attention.
Skin	IF ON SKIN: Wash with plenty of mild soap and water. Take off contaminated clothing and wash before reuse. If skin irritation occurs, get medical advice/attention.
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. Show this safety data sheet to the doctor in attendance.
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.
Extinguishing Media	If material is involved in a fire, use extinguishing media appropriate to surrounding fire conditions.
Fire and Explosion Hazard	When heated to decomposition, may release poisonous and corrosive fumes.
Hazardous Products of Combustion	Fire may produce irritating, toxic, and/or corrosive fumes, including potassium oxides, chlorine and HCl.
	Prevent entry into drains and waterways.

Special Fire Fighting Instructions

Personal Protective Equipment	Wear self-contained breathing apparatus (SCBA) and chemical splash suit. SCBA and structural firefighter's uniform may 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	No Data Available

6. ACCIDENTAL RELEASE MEASURES

General Response Procedure	Ensure adequate ventilation. Do not touch or walk through spilled material. Avoid generating dust. Avoid breathing dust and contact with eyes, skin and clothing.
Clean Up Procedures	Collect material (sweep or vacuum up) and place in suitable, properly labelled containers for possible reuse or disposal (see SECTION 13).
Containment	Stop leak if safe to do so – Prevent entry into waterways, drains or confined areas. Prevent dust cloud.
Decontamination	Ventilate area and wash spill site after material pickup is complete.
Environmental Precautionary Measures	Prevent entry into drains and waterways.
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 formation of dust and aerosols. Avoid breathing dust/aerosols and contact with eyes, skin and clothing. Do not ingest. Use personal protective equipment as required (see SECTION 8).
Storage	Store in a cool, dry, and well-ventilated place, out of direct sunlight. Keep container tightly closed - check regularly for spills. Avoid exposure to moisture (hygroscopic). Keep away from incompatible materials (see SECTION 10).
Container	Keep in the original container.

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 ; 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 avoid eye contact. Recommended: Safety glasses or chemical safety goggles.

- Hand protection: Handle with gloves. Recommended: Impervious protective gloves, e.g. Nitrile rubber.

- Skin/body protection: Wear appropriate personal protective clothing to avoid skin contact. Recommended: Body covering clothes, e.g. overalls and safety shoes/boots.

Special Hazards Precautions

No information available.

Work Hygienic Practices

Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling and before eating or smoking. Wash contaminated clothing and other protective equipment before storage or re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solid
Appearance	Crystals
Odour	None
Colour	White
pH	7
Vapour Pressure	No Data Available
Relative Vapour Density	No Data Available
Boiling Point	1,500 °C (sublimation)
Melting Point	773 °C
Freezing Point	No Data Available
Solubility	Soluble in water (28.1 g/100 ml)
Specific Gravity	1.987
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	>700 °C
Density	No Data Available
Specific Heat	No Data Available
Molecular Weight	74.55 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	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.
Reactions That Release Gases or Vapours	When heated to decomposition, may release poisonous and corrosive fumes, including potassium oxides, chlorine and HCl.
Release of Invisible Flammable Vapours and Gases	No information available.

10. STABILITY AND REACTIVITY

General Information	Reacts violently with BrF ₃ and sulfuric acid at 600°C.
Chemical Stability	Stable under normal conditions.
Conditions to Avoid	Avoid generating dust. Avoid heating to decomposition.
Materials to Avoid	Incompatible/reactive with oxidising agents, bromine trifluoride, sulphuric acid, potassium permanganate.
Hazardous Decomposition Products	When heated to decomposition, may release poisonous and corrosive fumes, including potassium oxides, chlorine and HCl.
Hazardous Polymerisation	Hazardous polymerisation will not occur.

11. TOXICOLOGICAL INFORMATION

General Information	Information on possible routes of exposure: <ul style="list-style-type: none">- Ingestion: No adverse effects expected; large amounts may cause nausea, vomiting, abdominal pain, diarrhoea or constipation and may affect the salt level in blood (hyperkalemia).- Eye contact: Slightly irritating (Rabbit).- Skin contact: Non-irritant (Rabbit). Not a sensitiser.- Inhalation: Breathing in dust may result in respiratory irritation. Chronic effects: Not mutagenic by the Ames Test. Negative in DNA damage and repair assay (rat hepatocytes). Not classified (carcinogenic) by IARC, OSHA, EPA. No adverse effect were observed on fertility and/or development.
Acute	
Ingestion	Acute toxicity (Oral): <ul style="list-style-type: none">- LD50, Rat: 2,600 mg/kg
Carcinogen Category	None

12. ECOLOGICAL INFORMATION

Ecotoxicity	Aquatic toxicity: <ul style="list-style-type: none">- LC50, Fish (Fathead minnow): 880 mg/L (96 h).- LC50, Crustacea (Daphnia magna): 357 mg/L (48 h).- EC50, Crustacea (Daphnia magna): 141 mg/L (48 h).
Persistence/Degradability	Biodegradation is not relevant for inorganic substance.
Mobility	Has a low sediment adsorption potential.
Environmental Fate	Prevent entry into drains and waterways.
Bioaccumulation Potential	Bioaccumulation is not likely to occur.
Environmental Impact	No Data Available

13. DISPOSAL CONSIDERATIONS

General Information	Dispose of contents/container in a safe manner and in accordance with local/regional/national regulations. Normally suitable for disposal at approved land waste site.
Special Precautions for Land Fill	Containers can be recycled after proper cleaning.

14. TRANSPORT INFORMATION

Land Transport (Australia)

ADG Code	
Proper Shipping Name	Potassium chloride
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
Comments	NON-DANGEROUS GOODS: Not regulated for LAND transport.

Land Transport (Malaysia)

ADR Code	
Proper Shipping Name	Potassium chloride
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
Comments	NON-DANGEROUS GOODS: Not regulated for LAND transport.

Land Transport (New Zealand)

NZS5433	
Proper Shipping Name	Potassium chloride
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
Comments	NON-DANGEROUS GOODS: Not regulated for LAND transport.

Land Transport (United States of America)

US DOT

Proper Shipping Name	Potassium chloride
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
Comments	NON-DANGEROUS GOODS: Not regulated for LAND transport.

Sea Transport

IMDG Code

Proper Shipping Name	Potassium chloride
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
Comments	NON-DANGEROUS GOODS: Not regulated for SEA transport.

Air Transport

IATA DGR

Proper Shipping Name	Potassium chloride
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
Comments	NON-DANGEROUS GOODS: Not regulated for AIR transport.

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)	Not Scheduled

Environmental Protection Authority (New Zealand)
Hazardous Substances and New Organisms Amendment Act 2015

Approval Code	Not Hazardous
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National/Regional Inventories

Australia (AIIC)	Listed
Canada (DSL)	Listed
Canada (NDSL)	Not Determined
China (IECSC)	Listed
Europe (EINECS)	231-211-8
Europe (REACH)	Not Determined
Japan (ENCS/METI)	Listed
Korea (KECI)	Listed
Malaysia (EHS Register)	Not Determined
New Zealand (NZIoC)	Listed
Philippines (PICCS)	Listed
Switzerland (Giftliste 1)	Not Determined
Switzerland (Inventory of Notified Substances)	Not Determined
Taiwan (NCSR)	Listed
USA (TSCA)	Listed

16. OTHER INFORMATION

Related Product Codes	POCHLA1000, POCHLA1001, POCHLA1002, POCHLA2000, POCHLA3000, POCHLA4000, POCHLA4100, POCHLA5000, POCHLA6000, POCHLO0100, POCHLO0400, POCHLO0500, POCHLO0600, POCHLO1000, POCHLO1001, POCHLO1002, POCHLO1003, POCHLO1004, POCHLO1005, POCHLO1006, POCHLO1007, POCHLO1008, POCHLO1009, POCHLO1010, POCHLO1011, POCHLO1012, POCHLO1013, POCHLO1100, POCHLO1200, POCHLO1500, POCHLO1501, POCHLO1600, POCHLO1700, POCHLO1750, POCHLO1755, POCHLO1800, POCHLO1801, POCHLO1802, POCHLO1803, POCHLO1804, POCHLO1805, POCHLO1806, POCHLO1807, POCHLO1808, POCHLO1809, POCHLO1810, POCHLO1811, POCHLO1812, POCHLO1813, POCHLO1814, POCHLO1815, POCHLO1816, POCHLO1817, POCHLO1818, POCHLO1819, POCHLO1820, POCHLO1821, POCHLO1850, POCHLO1900, POCHLO2000, POCHLO2100, POCHLO2105, POCHLO2150, POCHLO2160, POCHLO2200, POCHLO2250, POCHLO2255, POCHLO2300, POCHLO2310, POCHLO2320, POCHLO2350, POCHLO2360, POCHLO2370, POCHLO2400, POCHLO2500, POCHLO2501, POCHLO2600, POCHLO2700, POCHLO2701, POCHLO2800, POCHLO3000, POCHLO3001, POCHLO3002, POCHLO3003, POCHLO3010, POCHLO3020, POCHLO3030, POCHLO3031, POCHLO3032, POCHLO3040, POCHLO3041, POCHLO3042, POCHLO3050, POCHLO3060, POCHLO3070, POCHLO3100, POCHLO3200, POCHLO3201, POCHLO3202, POCHLO3203, POCHLO3204, POCHLO3205, POCHLO3500, POCHLO3600, POCHLO4000, POCHLO4001, POCHLO4002, POCHLO4200, POCHLO4201, POCHLO4202, POCHLO4300, POCHLO4500, POCHLO4501, POCHLO4600, POCHLO4700, POCHLO4800, POCHLO4801, POCHLO4820, POCHLO4840, POCHLO4850, POCHLO4860, POCHLO5000, POCHLO5001, POCHLO5200, POCHLO5201, POCHLO5225, POCHLO5400, POCHLO5500, POCHLO5501, POCHLO5600, POCHLO5601, POCHLO5800, POCHLO6000, POCHLO6001, POCHLO6500, POCHLO6501, POCHLO6520, POCHLO6525, POCHLO6530, POCHLO6550, POCHLO6700, POCHLO6800, POCHLO6805, POCHLO6810,
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SAFETY DATA SHEET POTASSIUM CHLORIDE REVISION 4, DATE 13 MAR 19

POCHLO6840, POCHLO6850, POCHLO6880, POCHLO6900, POCHLO7000, POCHLO7001, POCHLO7002, POCHLO7003, POCHLO7100, POCHLO7101, POCHLO7102, POCHLO7103, POCHLO7200, POCHLO7201, POCHLO7300, POCHLO7301, POCHLO7400, POCHLO7401, POCHLO7500, POCHLO7501, POCHLO7502, POCHLO7503, POCHLO7504, POCHLO7505, POCHLO7506, POCHLO7507, POCHLO7600, POCHLO7601, POCHLO7700, POCHLO7701, POCHLO7800, POCHLO7801, POCHLO7802, POCHLO7803, POCHLO7900, POCHLO7901, POCHLO8000, POCHLO8001, POCHLO8002, POCHLO8500, POCHLO8501, POCHLO8600, POCHLO8700, POCHLO8701, POCHLO8800, POCHLO8801, POCHLO8810, POCHLO8900, POCHLO8910, POCHLO8950, POCHLO8955, POCHLO8960, POCHLO9000, POCHLO9010, POCHLO9100, POCHLO9150, POCHLO9200, POCHLO9210, POCHLO9220, POCHLO9250, POCHLO9400, POCHLO9500, POCHLO9501, POCHLO9502, POCHLO9600, POCHLO9601, POCHLO9602, POCHLO9700, POCHLO9900

Revision	4
Revision Date	13 Mar 2019
Reason for Issue	Updated SDS
Key/Legend	<p>< Less Than</p> <p>> Greater Than</p> <p>AICS Australian Inventory of Chemical Substances</p> <p>atm Atmosphere</p> <p>CAS Chemical Abstracts Service (Registry Number)</p> <p>cm² Square Centimetres</p> <p>CO₂ Carbon Dioxide</p> <p>COD Chemical Oxygen Demand</p> <p>deg C (°C) Degrees Celcius</p> <p>EPA (New Zealand) Environmental Protection Authority of New Zealand</p> <p>deg F (°F) Degrees Farenheit</p> <p>g Grams</p> <p>g/cm³ Grams per Cubic Centimetre</p> <p>g/l Grams per Litre</p> <p>HSNO Hazardous Substance and New Organism</p> <p>IDLH Immediately Dangerous to Life and Health</p> <p>immiscible Liquids are insoluable in each other.</p> <p>inHg Inch of Mercury</p> <p>inH₂O Inch of Water</p> <p>K Kelvin</p> <p>kg Kilogram</p> <p>kg/m³ Kilograms per Cubic Metre</p> <p>lb Pound</p> <p>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.</p> <p>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.</p> <p>ltr or L Litre</p> <p>m³ Cubic Metre</p> <p>mbar Millibar</p> <p>mg Milligram</p> <p>mg/24H Milligrams per 24 Hours</p> <p>mg/kg Milligrams per Kilogram</p> <p>mg/m³ Milligrams per Cubic Metre</p> <p>Misc or Miscible Liquids form one homogeneous liquid phase regardless of the amount of either component present.</p> <p>mm Millimetre</p> <p>mmH₂O Millimetres of Water</p> <p>mPa.s Millipascals per Second</p> <p>N/A Not Applicable</p> <p>NIOSH National Institute for Occupational Safety and Health</p> <p>NOHSC National Occupational Heath and Safety Commission</p> <p>OECD Organisation for Economic Co-operation and Development</p> <p>Oz Ounce</p> <p>PEL Permissible Exposure Limit</p> <p>Pa Pascal</p> <p>ppb Parts per Billion</p> <p>ppm Parts per Million</p> <p>ppm/2h Parts per Million per 2 Hours</p> <p>ppm/6h Parts per Million per 6 Hours</p> <p>psi Pounds per Square Inch</p> <p>R Rankine</p>

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