

1. IDENTIFICATION

Product Name	Potassium Sulphate
Other Names	Potassium Sulphate (K ₂ SO ₄); SOP; SULFURIC ACID, DIPOTASSIUM SALT; Sulphate of Potash; Sulphuric acid, dipotassium salt
Uses	Industrial
Chemical Family	No Data Available
Chemical Formula	K ₂ SO ₄
Chemical Name	Potassium Sulphate
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.	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
Chemcall	New Zealand	0800-243622 +64-4-9179888
National Poisons Centre	New Zealand	0800-764766

2. HAZARD IDENTIFICATION

Poisons Schedule (Aust) No Data Available

Globally Harmonised System

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

Environmental Protection Authority (New Zealand)

Hazardous Substances and New Organisms Amendment Act 2015



HSNO Classifications

Health
Hazards

6.3B

Substances that are mildly irritating to the skin

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Potassium Sulphate	No Data Available	7778-80-5	95.0 - 99.0 %

4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure

Swallowed	Do not induce vomiting if swallowed. Give large quantities of water through mouth if conscious. If symptoms persist seek medical attention.
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 plenty of water. Seek medical attention if irritation occurs or persists.
Inhaled	Remove victim to fresh air. Give artificial respiration only if breathing has stopped. If breathing is difficult, give oxygen. Seek medical attention.
Advice to Doctor	Treat symptomatically based on judgement of doctor and individual reactions of patient.
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	Use appropriate media for surrounding fire (water, chemical foam, dry chemical or carbon dioxide). Use water spray to cool structures and containers exposed to fire.
Fire and Explosion Hazard	Product is a non-flammable solid.
Hazardous Products of Combustion	May release sulphur dioxide and sulphur trioxide and potassium oxides when heated in a fire.
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. Slippery when spilt. Eliminate all sources of ignition. Increase ventilation.
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Avoid generating dust. Stop leak if safe to do so. Isolate the danger area. Use clean, non-sparking tools and equipment.

Clean Up Procedures

Sweep up any spilt material and dispose of in an appropriate container.

Containment

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

Decontamination

Flush area with water to remove any residue.

Environmental Precautionary Measures

Do NOT let product reach drains or waterways. If product does enter a waterway, advise the Environmental 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. Take precautionary measures against static discharges by bonding and grounding equipment. Avoid contact with eyes, skin and clothing. Do not inhale product dust/fumes. Use proper equipment for lifting and transporting all containers. Avoid situations that could lead to harmful exposure.

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. Store away from heat, moisture and incompatible substances. 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

ACGIH / TLV = 1mg/m3
OSHA / PEL = 1mg/m3

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.

Personal Protection Equipment

RESPIRATOR: An effective dust mask, preferably a half face dust / mist respirator, should be worn where dust or mist is present (AS1715/1716).
EYES: Safety glasses should be worn at all times. Full face shield offers higher degree of protection. Contact lenses should not be worn as they may contribute to eye injury (AS1336/1337).
HANDS: Gloves should be worn to prevent skin contact (AS2161).
CLOTHING: Protective clothing or coveralls should be worn to prevent skin contact. Wash contaminated clothing with soap and water, dry thoroughly before reuse. Safety footwear should be worn as needed (AS3765/2210).

Work Hygienic Practices

Good industrial hygiene practices. Emergency shower and eyewash stations should be in reasonable proximity to work area.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State

Solid

Appearance

Crystalline Powder / Granules

Odour

Taste
Odourless

Colour

Off White to Beige / Pink or Brown powder



pH	7 - 9 50g/L in water at 20degC
Vapour Pressure	No Data Available
Relative Vapour Density	No Data Available
Boiling Point	No Data Available
Melting Point	1069 °C
Freezing Point	No Data Available
Solubility	11.1g K ₂ SO ₄ / 100ml water 20°C
Specific Gravity	2.662 g/cm ³
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	No Data Available
Specific Heat	No Data Available
Molecular Weight	174.26
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	Product is a non-flammable solid.
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	Product is a non-flammable solid.
Chemical Stability	Product is stable under normal conditions of use, storage and temperature.
Conditions to Avoid	No Data Available
Materials to Avoid	Avoid strong oxidising agents, chlorine, and nitric acid. Vigorous reaction will occur when potassium sulphate is melted with aluminium or magnesium.
Hazardous Decomposition Products	Decomposition products include sulphur dioxide, sulphur trioxide. May release sulphur dioxide and sulphur trioxide when heated in a fire.
Hazardous Polymerisation	Will not occur.



11. TOXICOLOGICAL INFORMATION

General Information	Animal Toxicity Data: LD50 (oral rat) = 6600mg/kg. Not listed as carcinogenic (IARC and ACGIH)
EyeIrritant	May cause irritation, redness and impaired vision.
Ingestion	May cause diarrhea, abdominal cramps, mouth and tongue pain, sore throat, nausea, stomach ache.
Inhalation	Irritating to the upper respiratory tract and mucous membranes. May cause sensitisation on inhalation.
SkinIrritant	May cause redness, irritation and sensitisation.
Carcinogen Category	No Data Available

12. ECOLOGICAL INFORMATION

Ecotoxicity	LC50 - Pimephales promelas (fathead minnow) - 680 mg/l - 96 h
Persistence/Degradability	Hazardous short term degradation products are not likely.
Mobility	No information available on mobility for this product.
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 (New Zealand)**

NZS5433

Proper Shipping Name	Potassium Sulphate
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 LAND transport.



Sea Transport

IMDG Code

Proper Shipping Name	Potassium Sulphate
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 Sulphate
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.

15. REGULATORY INFORMATION

General Information	No Data Available
Poisons Schedule (Aust)	No Data Available

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

Approval Code	HSR002794
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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)	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 POSULA1000, POSULA1001, POSULA1002, POSULA1003, POSULA1004, POSULA1005, POSULA1006, POSULA1100, POSULA1200, POSULA1400, POSULA1500, POSULA1600, POSULA2000, POSULA2001, POSULA2002, POSULA2100, POSULA2101, POSULA2500, POSULA2501, POSULA2900, POSULA3000, POSULA3001, POSULA3100, POSULA3200, POSULA3300, POSULA3400, POSULA3500, POSULA3900, POSULA3901, POSULA4000, POSULA4001, POSULA4100, POSULA4101, POSULA4200, POSULA4201, POSULA4500, POSULA4501, POSULA4700, POSULA4701, POSULA5000, POSULA5001, POSULA5100, POSULA5500, POSULA5700, POSULB1000, POSULB1500, POSULP0500, POSULP0600, POSULP0601, POSULP0602, POSULP0603, POSULP0700, POSULP0701, POSULP0702, POSULP0703, POSULP0704, POSULP0900, POSULP1000, POSULP1001, POSULP1002, POSULP1003, POSULP1004, POSULP1005, POSULP1006, POSULP1007, POSULP1008, POSULP1009, POSULP1010, POSULP1011, POSULP1012, POSULP1013, POSULP1014, POSULP1015, POSULP1016, POSULP1017, POSULP1018, POSULP1019, POSULP1020, POSULP1021, POSULP1022, POSULP1025, POSULP1030, POSULP1050, POSULP1055, POSULP1056, POSULP1063, POSULP1100, POSULP1200, POSULP1300, POSULP1301, POSULP1400, POSULP1500, POSULP1501, POSULP1502, POSULP1503, POSULP1504, POSULP1505, POSULP1506, POSULP1507, POSULP1510, POSULP1600, POSULP1700, POSULP1800, POSULP1801, POSULP1802, POSULP1803, POSULP1804, POSULP1805, POSULP1806, POSULP1807, POSULP1808, POSULP1809, POSULP1810, POSULP1811, POSULP1812, POSULP1813, POSULP1814, POSULP1815, POSULP1816, POSULP1817, POSULP1818, POSULP1819, POSULP1820, POSULP1821, POSULP1822, POSULP1823, POSULP1824, POSULP1825, POSULP1826, POSULP1827, POSULP1828, POSULP1829, POSULP1830, POSULP1831, POSULP1832, POSULP1900, POSULP2000, POSULP2001, POSULP2002, POSULP2020, POSULP2021, POSULP2022, POSULP2023, POSULP2024, POSULP2025, POSULP2026, POSULP2027, POSULP2200, POSULP2500, POSULP2501, POSULP2502, POSULP2600, POSULP2700, POSULP2800, POSULP2802, POSULP2900, POSULP3000, POSULP3010, POSULP3500, POSULP3600, POSULP3700, POSULP3800, POSULP3900, POSULP4000, POSULP4001, POSULP4002, POSULP4100, POSULP4200, POSULP4201, POSULP4202, POSULP4203, POSULP4300, POSULP4400, POSULP4401, POSULP4402, POSULP4404, POSULP4500, POSULP4600, POSULP4700, POSULP4701, POSULP4800, POSULP4801, POSULP4900, POSULP5000, POSULP5001, POSULP5100, POSULP5500, POSULP6200, POSULP6201, POSULP6202, POSULP6203, POSULP6204, POSULP6205, POSULP6206, POSULP6207, POSULP6300, POSULP6301, POSULP6302, POSULP6500, POSULP7000, POSULP7001, POSULP7500, POSULP7501, POSULP7502, POSULP7503, POSULP7510, POSULP8000, POSULP8800, POSULP9000, POSULP9500, POSULP9600, POSULP9601, POSULP9800, POSULP9801, POSULP9802, POSULP9803, POSUPH1000

Revision 3
Revision Date 16 Jan 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 Farenheit
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

