



ABN: 81 008 668 371

MATERIAL SAFETY DATA SHEET

Sulfate of Potash

Section 1 – Identification of the Material and Supplier

Product Name

Sulfate of Potash

Other names

Sulphate of potash, potassium sulfate, SOP, dipotassium sulfate, CSBP Product Code: 2831

Recommended use

Fertiliser, general purpose food additive

Company name

CSBP Limited

Address

Kwinana Beach Road, KWINANA

State

Western Australia

Postcode

6167

Telephone number

(08) 9411 8777 (Australia), +61 8 9411 8777 (Overseas)

Emergency telephone number

1800 093 333 (Australia), +61 8 9411 8444

Section 2 – Hazard Identification

Hazard Classification, including a statement of overall hazardous nature

HAZARDOUS SUBSTANCE.

Sulfate of Potash is not classified as hazardous according to Safe Work Australia criteria.

DANGEROUS GOODS.

Sulfate of Potash is not classified as a dangerous good according to the ADG Code.

Section 3 – Composition/Information on Ingredients

Chemical identity of ingredients

Dipotassium sulfate

Potassium Chloride

Proportion of ingredients

96%

< 4%

CAS Number for ingredients

7778-80-5

7447-40-7

Section 4 – First Aid Measures

First Aid Facilities

Whenever fertilisers are in regular use ensure drinking water and eyewash facilities are available.

FIRST AID PROCEDURES FOR DEALING WITH THIS PRODUCT AND EXPOSURE TO IT

1. Swallowed

If person is conscious, rinse mouth thoroughly with water immediately and give water or milk to drink. Induce vomiting if more than a small quantity has been swallowed. Seek medical attention if there is pain, or difficulty with swallowing.

2. Eyes

Flush gently with running water for at least 15 minutes lifting lower and upper eyelids occasionally. Seek medical attention if irritation develops.

3. Skin

Gently flush affected areas with water. Seek medical attention if irritation develops. Remove all contaminated clothing and launder before re-use.

4. Inhalation

If over exposure occurs remove affected person to a well ventilated area. Keep warm and at rest. In emergency situations, if breathing is difficult give oxygen. If the affected person suffers cardiac arrest commence cardio-pulmonary resuscitation immediately. Seek urgent medical attention.

ADVICE TO DOCTOR.

Treat symptomatically.



ABN: 81 008 668 371

MATERIAL SAFETY DATA SHEET

Sulfate of Potash

Section 5 – Fire Fighting Measures

Product flammability

Non flammable and does not support combustion.

Suitable extinguishing media

Non flammable and does not support combustion.

Hazard from combustion products

When heated above 1066°C, sulfate of potash may yield toxic oxides of sulfur.

Hazchem Code

None allocated.

Section 6 – Accidental Release Measures

Methods and Materials for containment and clean up

Any spillage should be cleaned up promptly and swept up. Prevent run-off into drains and waterways.

Section 7 – Handling and Storage

Precautions for safe handling

Segregate from food or foodstuffs, oxidizing agents (Class 5) and acids (Class 8) when transporting.

Conditions for safe storage, including any incompatibilities

Store in a cool, clean, dry and well ventilated area. Avoid contact with moisture, as it will cause product-handling problem.

Store away from oxidizers, acids and from food or drink. Violent explosion occurs when sulfate of potash is melted with aluminum.

Section 8 – Exposure Controls/Personal Protection

National exposure standards

No specific official limit. ACGIH recommended value for inhalable particulates is 10 mg/m³ (TLV/TWA).

Engineering controls

Use in well ventilated areas. Avoid high dust concentration.

Personal protective equipment

Wear rubber or PVC gloves to prevent skin contact. Where dust is a problem use a P2 type canister Respirator. Wear long sleeves and long trousers to prevent contact. Wear chemical safety glasses to prevent eye contact.



ABN: 81 008 668 371

MATERIAL SAFETY DATA SHEET

Sulfate of Potash

Section 9 – Physical and Chemical Properties

Appearance (colour, physical form, shape)

Colourless to white hard crystals or powdered solid.

Odour

Odourless.

pH of 10% solution

3 – 4.

Vapour pressure

Does not exert significant vapour pressure.

Vapour density

Not available.

Boiling point/range

1689°C at 100 kPa.

Freezing/melting point

1067°C.

Evaporation rate

Not available.

Solubility

Soluble in water (12g/100g water at 20°C), not soluble in alcohol or acetone.

Specific Gravity / Bulk density

2.66 / 1.03 – 1.20 t/m³.

% Volatiles

Not available.

Flammability

Not Flammable.

Flash point and method of detecting flash point

Not relevant.

Upper and lower flammable (explosive) limits in air

Not relevant.

Ignition temperature

Not available.

Section 10 – Stability and Reactivity

Reactivity

Incompatible with aluminium, magnesium or sodium sulfate and may explode in combination with these at temperatures exceeding 800 °C.

Corrosivity similar to common salt. In the presence of moisture, sulfate of potash is mildly corrosive to cement, mild steel, zinc, and copper.

Decomposition products

No data available.



ABN: 81 008 668 371

MATERIAL SAFETY DATA SHEET

Sulfate of Potash

Section 11 – Toxicological Information

HEALTH EFFECTS

Low toxicity. Use safe work practices to avoid eye or skin contact and dust inhalation.

Sulfate of potash is relatively non toxic when ingested in small quantities. Acute potassium intoxication is rare since the potassium ion tends to cause vomiting. Ingestion of large quantities may cause gastrointestinal irritation.

Inhalation:

High dust concentration of air-borne material may cause irritation to the nose and upper respiratory tract; symptoms may include coughing, shortness of breath and sore throat.

Skin:

Prolonged contact may cause some irritation, including redness and itching. No harmful effects from skin absorption have been recorded.

Eye:

May cause irritation, redness and pain following contact.

Swallowed:

Presents little toxicity, unless large amounts are ingested. Potassium sulfate is slowly absorbed from the alimentary tract. Because of osmotic activity, it will draw water into the lumen of the bowel. Consequently, massive doses exceeding about 100 grams of potassium sulfate give rise to severe gastro-intestinal irritation, with symptoms such as nausea, vomiting, diarrhea, irregular heart beats (arrhythmia), dehydration and hypertension. Smaller doses will likely irritate the mouth, esophagus, stomach, etc.

TOXICITY DATA

Dipotassium sulfate (7778-80-5)

LDLo (Subcutaneous): 3000 mg/kg (guinea pig)

TDLo (Ingestion): 750 mg/kg (woman)

LD50 (Ingestion): 6600 mg/kg (rat)

LDLo (Ingestion): 750 mg/kg (woman)

Potassium chloride (7447-40-7)

LDLo (Intravenous): 77 mg/kg (guinea pig)

LDLo (Intraperitoneal): 900 mg/kg (guinea pig)

LD50 (Intraperitoneal): 620 mg/kg (mouse)

LDLo (Subcutaneous): 2120 mg/kg (frog)

TDLo (Ingestion): 60 mg/kg/days (woman)

LD50 (Ingestion): 1500 mg/kg (mouse)

LDLo (Ingestion): 20 mg/kg (man)

LD50 (Intravenous): 117 mg/kg (mouse)

Section 12 – Ecological Information

Environment

It is not anticipated to cause any adverse effects to plants or animals.

Section 13 – Disposal Considerations

Disposal methods and containers

Dispose of on a farm, or authorised waste facility in accordance with statutory requirements.

Clean up personnel should vacuum or wet sweep to avoid dust dispersal.

Contact the manufacturer if additional information is required.

Legislation

Dispose of in accordance with relevant local legislation.



ABN: 81 008 668 371

MATERIAL SAFETY DATA SHEET

Sulfate of Potash

Section 14 – Transport Information

UN Number

None allocated.

UN Proper shipping name

None allocated.

Class and subsidiary risk

None allocated.

Packing group

None allocated.

EPG

None allocated.

Hazchem code

None allocated.

Section 15 – Regulatory Information

Australian regulatory information

A poison schedule number has not been allocated to this product using the criteria in the Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP).

All chemicals listed on the Australian Inventory of Chemical Substances (AICS).

Section 16 – Other Information

Key / legend to abbreviations and acronyms used in the MSDS

| | |
|-------------------|---|
| NOHSC | National Occupational Health and Safety Commission |
| SUSDP | Standard for the Uniform Scheduling of Drugs and Poisons |
| ACGIH | American Conference of Government Industrial Hygienists |
| ES-TWA | Exposure Standard – Time weighted average |
| ES-STEL | Exposure Standard – Short term exposure level |
| ES-Peak | Exposure Standard – Peak level |
| LD Lo | The lowest dose in an animal study in which lethality occurred. |
| LD50 | Lethal dose 50. The single dose of a substance that causes the death of 50% of an animal population from exposure to the substance by any route other than inhalation |
| t/m ³ | Tonnes per cubic metre |
| mg/m ³ | Milligrams per cubic metre |
| mg/kg | Milligrams per kilogram |
| pH | relates to hydrogen ion concentration - this value will relate to a scale of 0 - 14, where 0 is highly acidic and 14 is highly alkaline |

Important Notes

1. To the best of our knowledge this document complies with the National Code of Practice for the Preparation of Material Safety Data Sheets 2nd Edition [NOHSC:2011 (2003)].
2. This material safety data sheet summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this material safety data sheet and consider the information in the context of how the product will be handled and used in the workplace, including in conjunction with other products.
3. If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact the Safety and Emergency Services Department, CSBP Limited on (08) 9411 8777 (Australia), +61 8 9411 8777 (Overseas).
4. Our responsibility for products sold, is subject to our terms and conditions, a copy of which is sent to our customers, and is also available on request.
5. CSBP reserves the right to make change to material safety data sheets without notice.