

Safety Data Sheet POTASSIUM BICARBONATE

SDS no. 22GGR8M6 • Version 1.0 • Date of issue: 2023-02-04

SECTION 1: Identification

GHS Product identifier

Product name POTASSIUM BICARBONATE

Recommended use of the chemical and restrictions on use

Manufacture of pure potassium carbonate, low-pH liquid detergents, fire-extinguishing agent, analytical reagent, agriculture (improves soils, corrects soil pH, reduces acidity, fertilizer, feed), catalyst (polymerization of synthetic fibres, dehydrogenation of olefins), pharmaceuticals and foods (antacid, electrolyte replenisher and potassium supplement, an excipient, leavening agent (baking powders), pH control agent, and a nutrient supplement (e.g., infant formulations), processing aid in extruded foods, foaming and fizzing agent in instant beverages, colour preservative), used in impregnated paper or cellulose as a filter for tobacco smoke, household odour remover, an accelerator in fast setting cements, aqueous resin-based coatings and adhesives, high-temperature polymer blowing agent, detergent builder, deicer, hair and skin products, and laboratory reagent.

Supplier's details

Name ChemSupply Australia Pty Ltd
Address 38-50 Bedford Street
5013 Gillman South Australia
Australia

Telephone 08 8440 2000
email www.chemsupply.com

Emergency phone number

CHEMCALL 1800 127 406 (Australia) / +64-4-917-9888 (International)

SECTION 2: Hazard identification

General hazard statement

Not classified as dangerous goods according to the Australian Dangerous Goods Code (ADG).

Classified as non-Hazardous according to the Globally Harmonised System of classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.

Classification of the substance or mixture

GHS classification in accordance with: UN GHS revision 7

Not a hazardous substance or mixture.

GHS label elements, including precautionary statements

Not a hazardous substance or mixture.

Other hazards which do not result in classification

Not a hazardous substance or mixture.

SECTION 3: Composition/information on ingredients

Mixtures

Molecular weight: 100.12

Components

Component	Concentration
Potassium bicarbonate (CAS no.: 298-14-6; EC no.: 206-059-0)	100 % (weight)
CLASSIFICATIONS: No data available. HAZARDS: No data available.	

SECTION 4: First-aid measures

Description of necessary first-aid measures

General advice

First Aid Facilities: Normal washroom facilities.

First aid is not generally required. If in doubt, contact a Poisons Information Centre (e.g. phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor.

If inhaled

If inhaled, remove from contaminated area. Apply artificial respiration if not breathing.

In case of skin contact

If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

If swallowed, do NOT induce vomiting.

Most important symptoms/effects, acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

Indication of immediate medical attention and special treatment needed, if necessary

Treat symptomatically based on judgement of doctor and individual reactions of the patient.

SECTION 5: Fire-fighting measures

Suitable extinguishing media

Use extinguishing media appropriate for surrounding fire.

Specific hazards arising from the chemical

Irritating and highly toxic gases including carbon monoxide, carbon dioxide, oxides of potassium and potassium carbonate.

Material does not burn. Runoff may pollute waterways. Fire or heat may produce irritating, poisonous and/or corrosive fumes. Containers may explode when heated.

Special protective actions for fire-fighters

Fire fighters should wear full protective clothing and self-contained breathing apparatus (SCBA) operated in positive pressure mode. Fight fire from safe location.

Further information

Material is an ingredient of dry powder fire extinguishers, fire extinguishers for Class B (flammable liquids and gases) and Class C (electrical) type fires.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment. Avoid dust formation. For personal protection see section 8.

Methods and materials for containment and cleaning up

Sweep up and shovel. Keep in suitable, closed containers for disposal.

SECTION 7: Handling and storage

Precautions for safe handling

Avoid ingestion and inhalation of dust. Avoid contact with skin and eyes. Avoid generating dust. Keep containers tightly closed when not in use. Protect against physical damage. Use in designated areas with adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. If you feel unwell, seek medical attention and show the label when possible.

Wear suitable protective clothing. Ensure a high level of personal hygiene is maintained when using this product. That is; always wash hands before eating, drinking, smoking or using the toilet. When using, do not eat, drink or smoke. Wash thoroughly after handling. Wash clothing before reuse. 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. Do not reuse containers.

Conditions for safe storage, including any incompatibilities

Store in labelled, corrosion-resistant, tightly closed containers, in a cool, dry, well-ventilated area away from incompatible materials. Material is very hygroscopic. Protect from physical damage, direct sunlight and moisture. Use shelves or cabinets sturdy enough to bear the weight of the chemicals. Be sure that it is not necessary to strain to reach materials, and that shelves are not overloaded. 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.

Corrosiveness: A corrosion inhibitor.

SECTION 8: Exposure controls/personal protection

Appropriate engineering controls

Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, gas, etc.) below recommended exposure limits.

Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

The use of a face shield, chemical goggles or safety glasses with side shield protection as appropriate. Must comply with Australian Standards AS 1337 and be selected and used in accordance with AS 1336.

Skin protection

Clean impervious clothing should be worn. Clothing for protection against

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chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.

Hand Protection: Normally not required but if in doubt ensure hand protection should comply with AS 2161, Occupational protective gloves - Selection, use and maintenance.

Body protection

Suitable protective workwear, e.g. cotton overalls buttoned at neck and wrist is recommended. Chemical resistant apron is recommended where large quantities are handled.

Respiratory protection

If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable vapor/ mist filter should be used. Refer to relevant regulations for further information concerning respiratory protective requirements. Reference should be made to Australian Standards AS/ NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.

SECTION 9: Physical and chemical properties

Basic physical and chemical properties

Physical state	Solid
Appearance	Clear, colourless to white monoclinic crystals, granular solid, powder, or crystalline powder.
Color	No data available.
Odor	Odourless.
Odor threshold	No data available.
Melting point/freezing point	Decomposes.
Boiling point or initial boiling point and boiling range	Decomposes.
Flammability	No data available.
Lower and upper explosion limit/flammability limit	No data available.
Flash point	No data available.
Explosive properties	No data available.
Auto-ignition temperature	No data available.
Decomposition temperature	approx. 127 °C.
Oxidizing properties	No data available.
pH	8.4 - 8.6 (99 g/l, H ₂ O, 20 °C), slightly basic in solution.
Kinematic viscosity	No data available.
Solubility	Solubility in Water: Very highly soluble (333 g/l @ 20 °C). [13] Solubility in Organic Solvents: Soluble in potassium carbonate solution. Insoluble in alcohol.
Partition coefficient n-octanol/water (log value)	No data available.
Vapor pressure	0 hPa at 20 °C.
Evaporation rate	No data available.
Density and/or relative density	Specific Gravity: 2.17; [AL] Density: Bulk Density: 990 - 1120 kg/m ³ .
Relative vapor density	No data available.

Particle characteristics

No data available.

Supplemental information regarding physical hazard classes

No data available.

Further safety characteristics (supplemental)

[3U] Other Information: Taste: salty.

SECTION 10: Stability and reactivity

Reactivity

Stable under normal conditions of storage and handling.

Chemical stability

Stable under normal temperatures, pressures and conditions of use and storage.

Possibility of hazardous reactions

Develops CO₂ when reacted with acid.

Conditions to avoid

Contact with acids, bases, lime (forms corrosive potassium hydroxide (KOH)), exposure to heat, flame, other sources of ignition, and incompatible materials.

Incompatible materials

Strong oxidising agents and acids, acidic conditions, bases. (Potassium carbonyl, magnesium, chlorine trifluoride are listed for the carbonate.)

Hazardous decomposition products

Irritating and highly toxic gases including carbon monoxide, carbon dioxide, oxides of potassium and potassium carbonate.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

May cause irritation of the digestive tract. Large quantities may cause nausea, upset stomach, vomiting, loss of appetite, and diarrhoea.

Mild alkaline irritant to respiratory system. Inhalation of product dusts may cause irritation of the nose, throat and respiratory system. Coughing, sneezing, possible breathing difficulty in acute cases.

Skin corrosion/irritation

May cause slight skin irritation or mechanical irritation resulting in redness and itching.

Serious eye damage/irritation

May cause mild to moderate eye irritation, or abrasive irritation, resulting in possible redness and itching due to alkaline effect or abrasion.

Respiratory or skin sensitization

No data available.

Germ cell mutagenicity

No data available.

Carcinogenicity

No data available.

Reproductive toxicity

No data available.

Specific target organ toxicity (STOT) - single exposure

No data available.

Specific target organ toxicity (STOT) - repeated exposure

No data available.

Aspiration hazard

No data available.

Additional information

Prolonged or repeated exposure to this material will result in skin irritation leading to possible dermatitis, and may aggravate existing respiratory disorders.

SECTION 12: Ecological information

Toxicity

No data available.

Persistence and degradability

No data available.

Bioaccumulative potential

No data available.

Mobility in soil

No data available.

Results of PBT and vPvB assessment

No data available.

Endocrine disrupting properties

No data available.

Other adverse effects

No data available.

SECTION 13: Disposal considerations

Disposal methods

Product disposal

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers.

Other disposal recommendations

Do not discharge this material into waterways, drains and sewers.

SECTION 14: Transport information

ADG (Road and Rail)

Not dangerous goods

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IMDG

Not dangerous goods

IATA

Not dangerous goods

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product in question

Australia SUSMP

Poison Schedule: NS

Canadian Domestic Substances List (DSL)

Chemical name: Carbonic acid, monopotassium salt

CAS: 298-14-6

SECTION 16: Other information

Further information/disclaimer

ChemSupply Australia Pty Ltd does not warrant that this product is suitable for any use or purpose. The user must ascertain the suitability of the product before use or application intended purpose. Preliminary testing of the product before use or application is recommended. Any reliance or purported reliance upon ChemSupply Australia Pty Ltd with respect to any skill or judgement or advice in relation to the suitability of this product of any purpose is disclaimed. Except to the extent prohibited at law, any condition implied by any statute as to the merchantable quality of this product or fitness for any purpose is hereby excluded. This product is not sold by description. Where the provisions of Part V, Division 2 of the Trade Practices Act apply, the liability of ChemSupply Australia Pty Ltd is limited to the replacement of supply of equivalent goods or payment of the cost of replacing the goods or acquiring equivalent goods.