

SAFETY DATA SHEET



according to Regulation (EC) No 1907/2006 (REACH) as amended

potassium carbonate

| | | | |
|---------------|------------------|---------|-----|
| Creation date | 01st June 2021 | Version | 1.3 |
| Revision date | 30th August 2024 | | |

SECTION 1: Identification of the substance/mixture and of the company/undertaking

- 1.1. Product identifier**
Substance / mixture: potassium carbonate
Chemical name: substance
CAS number: potassium carbonate
EC (EINECS) number: 584-08-7
Registration number: 209-529-3
01-2119532646-36-0000
- 1.2. Relevant identified uses of the substance or mixture and uses advised against**
Substance's intended use
Ingredient for cosmetics. Food additive. Parenteral applications. Medicinal products.
Substance uses advised against

- 1.3. Details of the supplier of the safety data sheet**
Distributor
Name or trade name: Macco Organiques, s.r.o.
Address: Zahradní 1938/46c, Bruntál 1, 792 01
Czech Republic
Identification number (CRN): 26819210
VAT Reg No: CZ26819210
Phone: +420 555 530 300
E-mail: macco@macco.cz
Competent person responsible for the safety data sheet
Name: Petr Ševčík
E-mail: petr.sevcik@macco.cz
- 1.4. Emergency telephone number**
European emergency number: 112

SECTION 2: Hazards identification

- 2.1. Classification of the substance or mixture**
Classification of the substance in accordance with Regulation (EC) No 1272/2008
The substance is classified as dangerous.

Skin Irrit. 2, H315
Eye Irrit. 2, H319
STOT SE 3, H335

Most serious adverse effects on human health and the environment

Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.

- 2.2. Label elements**
Hazard pictogram



Signal word

Warning

Dangerous substance

potassium carbonate
(EC: 209-529-3; CAS: 584-08-7)

Hazard statements

| | |
|------|-----------------------------------|
| H315 | Causes skin irritation. |
| H319 | Causes serious eye irritation. |
| H335 | May cause respiratory irritation. |

Precautionary statements

| | |
|------|-----------------------|
| P261 | Avoid breathing dust. |
|------|-----------------------|

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- P264 Wash face, hands and exposed parts of the body thoroughly after handling.
P280 Wear protective gloves/eye protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P362+P364 Take off contaminated clothing and wash it before reuse.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.

2.3. Other hazards

The substance does not have endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605. Substance does not meet the criteria for PBT or vPvB in accordance with Annex XIII of Regulation (EC) No. 1907/2006 (REACH) as amended.

SECTION 3: Composition/information on ingredients

3.1. Substances

Chemical characterization

The substance specified below.

| Identification numbers | Substance name | Content in % weight | Classification according to Regulation (EC) No 1272/2008 | Note |
|---|--|---------------------|--|------|
| CAS: 584-08-7 EC: 209-529-3 Registration number: 01-2119532646-36-0000 | substance main component potassium carbonate | ≥99 | Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 | |

Full text of all classifications and hazard statements is given in the section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Take care of your own safety. If any health problems are manifested or if in doubt, inform a doctor and show him information from this safety data sheet. If unconscious, put the person in the stabilized (recovery) position on his side with his head slightly bent backwards and make sure that airways are free; never induce vomiting. If the person vomits by himself, make sure that the vomit is not inhaled. In life threatening conditions first of all provide resuscitation of the affected person and ensure medical assistance. Respiratory arrest - provide artificial respiration immediately. Cardiac arrest - provide indirect cardiac massage immediately.

If inhaled

Terminate the exposure immediately; move the affected person to fresh air. Protect the person against growing cold. Provide medical treatment if irritation, dyspnoea or other symptoms persist.

If on skin

Remove contaminated clothes. Wash the affected area with plenty of water, lukewarm if possible. Soap, soap solution or shampoo should be used if there is no skin injury. Provide medical treatment if skin irritation persists.

If in eyes

Rinse eyes immediately with a flow of running water, open the eyelids (also using force if needed); remove contact lenses immediately if worn by the affected person. Rinsing should continue at least for 10 minutes. Provide medical treatment, specialized if possible.

If swallowed

Rinse out the mouth with water and provide 2-5 dL of water. Provide medical treatment if the person has any health problems.

4.2. Most important symptoms and effects, both acute and delayed

If inhaled

May cause respiratory irritation.

If on skin

Causes skin irritation.

If in eyes

Causes serious eye irritation.

If swallowed

Irritation, nausea.

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4.3. Indication of any immediate medical attention and special treatment needed

Symptomatic treatment.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Alcohol-resistant foam, carbon dioxide, powder, water spray jet, water mist.

Unsuitable extinguishing media

Water - full jet.

5.2. Special hazards arising from the substance or mixture

In the event of fire, carbon monoxide, carbon dioxide and other toxic gases may arise. Inhalation of hazardous degradation (pyrolysis) products may cause serious health damage.

5.3. Advice for firefighters

Self-Contained Breathing Apparatus (SCBA) with a chemical protection suit only where personal (close) contact is likely. Use a self-contained breathing apparatus and full-body protective clothing. Do not allow run-off of contaminated fire extinguishing material to enter drains or surface and ground water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment for work. Follow the instructions in the Sections 7 and 8. Provide sufficient ventilation. Avoid dust formation. Do not inhale dust. Prevent contact with skin and eyes.

6.2. Environmental precautions

Prevent contamination of the soil and entering surface or ground water. In the event of substantial pollution, contact respective authorities and wastewater treatment plants.

6.3. Methods and material for containment and cleaning up

Place the product mechanically in an appropriate manner. Dispose of the collected material according to the instructions in the section 13. After removal of the product, wash the contaminated site with plenty of water.

6.4. Reference to other sections

See the Section 7, 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Prevent formation of dust in concentrations exceeding the occupational exposure limits. Do not inhale dust. Prevent contact with skin and eyes. Wash hands and exposed parts of the body thoroughly after handling. Use only outdoors or in a well-ventilated area. Use personal protective equipment as per Section 8. Observe valid legal regulations on safety and health protection.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed containers in cold, dry and well ventilated areas designated for this purpose. Keep container tightly closed.

7.3. Specific end use(s)

not available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Not specified.

DNEL

| potassium carbonate | | | |
|---------------------|-------------------|-----------------------------|-----------------------|
| Workers / consumers | Route of exposure | Value | Effect |
| Workers | Inhalation | 10 mg/m ³ of air | Chronic effects local |
| Workers | Inhalation | 10 mg/m ³ of air | Acute effects local |

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8.2. Exposure controls

Follow the usual measures intended for health protection at work and especially for good ventilation. This can be achieved only by local suction or efficient general ventilation. If exposure limits cannot be observed in this mode, suitable protection of airways must be used. Do not eat, drink and smoke during work. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest.

Eye/face protection

Protective goggles.

Skin protection

Hand protection: Protective gloves resistant to the product. When choosing appropriate thickness, material and permeability of the gloves, observe recommendations of their particular manufacturer. Observe other recommendations of the manufacturer. Other protection: protective workwear. Contaminated skin should be washed thoroughly.

Respiratory protection

Half-mask with anti-dust filter when the exposition limits of substances are exceeded or in the location with insufficient ventilation.

Thermal hazard

Not available.

Environmental exposure controls

Observe usual measures for protection of the environment, see Section 6.2.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|--|---|
| Physical state | solid |
| Colour | white |
| Odour | without fragrance |
| Melting point/freezing point | 891 °C |
| Boiling point or initial boiling point and boiling range | cannot be determined - decomposition occurs |
| Flammability | non-flammable |
| Lower and upper explosion limit | not applicable |
| Flash point | not applicable |
| Auto-ignition temperature | not applicable |
| Decomposition temperature | not determined |
| pH | 11.6 (5% solution at 20 °C) |
| Kinematic viscosity | not applicable |
| Solubility in water | 110.5g / 100g 20°C |
| Partition coefficient n-octanol/water (log value) | not applicable |
| Vapour pressure | not applicable |
| Density and/or relative density | |
| Density | 2.428 g/cm ³ at 19 °C |
| Relative vapour density | not applicable |
| Particle characteristics | data not available |
| Form | solid: crystalline, powder |

9.2. Other information

| | |
|----------------------|----------------------|
| Oxidising properties | It is not oxidising. |
|----------------------|----------------------|

SECTION 10: Stability and reactivity

10.1. Reactivity

Hygroscopic substance. The substance is non-flammable.

10.2. Chemical stability

The product is stable under normal conditions.

10.3. Possibility of hazardous reactions

React violently with acids to evolve CO₂ (foaming).

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10.4. Conditions to avoid

The product is stable and no degradation occurs under normal use. Heat. Humid air.

10.5. Incompatible materials

Strong acids. Aluminium. Copper. Brass.

10.6. Hazardous decomposition products

Not developed under normal uses. Dangerous outcomes such as carbon monoxide and carbon dioxide are formed at high temperature and in fire.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

No toxicological data is available for the substance.

Acute toxicity

Based on available data the classification criteria are not met.

| potassium carbonate | | | | | | |
|------------------------|------------------|----------|----------------|---------------|-------------------------|-----|
| Route of exposure | Parameter | Method | Value | Exposure time | Species | Sex |
| Oral | LD ₅₀ | OECD 401 | >2000 mg/kg bw | | Rat (Rattus norvegicus) | F/M |
| Inhalation (dust/mist) | LC ₅₀ | | 6 mg/l | 4,5 hours | Rat | F/M |
| Dermal | LD ₅₀ | | >2000 mg/kg bw | 24 hours | Rabbit | F/M |

Skin corrosion/irritation

Causes skin irritation.

| potassium carbonate | | | | |
|---------------------|-------------------|----------|---------------|---------|
| Route of exposure | Result | Method | Exposure time | Species |
| Dermal | Moderate irritant | OECD 404 | 24 hours | Rabbit |

Serious eye damage/irritation

Causes serious eye irritation.

| potassium carbonate | | | |
|---------------------|------------|---------------|---------|
| Route of exposure | Result | Exposure time | Species |
| Eye | Irritating | 72 hours | Rabbit |

Respiratory or skin sensitisation

Based on available data the classification criteria are not met.

| potassium carbonate | | | | |
|---------------------|-----------------|---------------|--|-----|
| Route of exposure | Result | Exposure time | Species | Sex |
| Skin | Not sensitizing | 48 hours | Guinea-pig (Cavia aperea f. porcellus) | |

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Germ cell mutagenicity

Based on available data the classification criteria are not met.

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|---------------------|----------|---------------|-----------------------|-----------------------------------|-----|
| Result | Method | Exposure time | Specific target organ | Species | Sex |
| Negative | OECD 471 | | | Bacteria (Salmonella typhimurium) | |

Carcinogenicity

No data available for the substance. Based on available data the classification criteria are not met.

Reproductive toxicity

Based on available data the classification criteria are not met.

| potassium carbonate | | | | | | | |
|---------------------|-----------|----------|------------------|-----------------------|-----------|---------|-----|
| Effect | Parameter | Method | Value | Exposure time | Result | Species | Sex |
| Maternal toxicity | NOEL | OECD 414 | 290 mg/kg bw/day | 10 days (7 days/week) | No effect | Mouse | F |

Toxicity for specific target organ - single exposure

May cause respiratory irritation.

Toxicity for specific target organ - repeated exposure

Based on available data the classification criteria are not met.

| potassium carbonate | | | | | | | | |
|-----------------------|-----------|----------|-------------------|-----------------------------------|-----------------------|-----------|-------------------------|-----|
| Route of exposure | Parameter | Method | Value | Exposure time | Specific target organ | Result | Species | Sex |
| Inhalation (aerosols) | NOAEC | OECD 424 | 0.123 mg/l of air | 21 days (7 days/week, 6 hour/day) | Nervous system | No effect | Rat (Rattus norvegicus) | F/M |

Repeated dose toxicity

| potassium carbonate | | | | | | |
|---------------------|-----------|-----------|------------------------|-------------------------|-------------------------|-----|
| Route of exposure | Parameter | Result | Value | Exposure time | Species | Sex |
| Oral | NOAEL | No effect | 2667-3331 mg/kg bw/day | 30 months (7 days/week) | Rat (Rattus norvegicus) | F/M |

Aspiration hazard

No data available for the substance. Based on available data the classification criteria are not met.

11.2. Information on other hazards

The substance does not have endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 12: Ecological information

12.1. Toxicity

Based on available data the classification criteria are not met.

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Acute toxicity

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|---------------------|--------------|----------|---------------|----------------------------|-------------|---------------------|
| Parameter | Method | Value | Exposure time | Species | Environment | Value determination |
| LC ₅₀ | EPA OPP 72-1 | 68 mg/l | 96 hours | Fish (Oncorhynchus mykiss) | Fresh water | Flow-through system |
| EC ₅₀ | EPA OPP 72-2 | 430 mg/l | 48 hours | Daphnia (Daphnia magna) | Fresh water | Static system |

12.2. Persistence and degradability

No data available for the substance.

12.3. Bioaccumulative potential

No data available for the substance.

12.4. Mobility in soil

No data available for the substance.

12.5. Results of PBT and vPvB assessment

Product does not contain any substance meeting the criteria for PBT or vPvB in accordance with the Annex XIII of Regulation (EC) No 1907/2006 (REACH) as amended.

12.6. Endocrine disrupting properties

This substance does not have endocrine disrupting properties with respect to non-target organisms as it does not meet the criteria set out in section B of Regulation (EU) No 2017/2100.

12.7. Other adverse effects

Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Hazard of environmental contamination; dispose of the waste in accordance with the local and/or national regulations. Proceed in accordance with valid regulations on waste disposal. Any unused product and contaminated packaging should be put in labelled containers for waste collection and submitted for disposal to a person authorised for waste removal (a specialized company) that is entitled for such activity. Do not empty unused product in drainage systems. The product must not be disposed of with municipal waste. Empty containers may be used at waste incinerators to produce energy or deposited in a dump with appropriate classification. Perfectly cleaned containers can be submitted for recycling.

Waste management legislation

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste, as amended. Decision 2000/532/EC establishing a list of wastes, as amended.

Waste type code

06 03 14 solid salts and solutions other than those mentioned in 06 03 11 and 06 03 13

Packaging waste type code

06 03 00 wastes from the MFSU of salts and their solutions and metallic oxides

SECTION 14: Transport information

14.1. UN number or ID number

not subject to transport regulations

14.2. UN proper shipping name

not relevant

14.3. Transport hazard class(es)

not relevant

14.4. Packing group

not relevant

14.5. Environmental hazards

not relevant

14.6. Special precautions for user

Reference in the Sections 4 to 8.

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14.7. Maritime transport in bulk according to IMO instruments

not relevant

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18th December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing the European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No. 793/93 and Commission Regulation (EC) No. 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, as amended. REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Commission Regulation (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

15.2. Chemical safety assessment

Not available.

SECTION 16: Other information

A list of standard risk phrases used in the safety data sheet

| | |
|------|-----------------------------------|
| H315 | Causes skin irritation. |
| H319 | Causes serious eye irritation. |
| H335 | May cause respiratory irritation. |

Guidelines for safe handling used in the safety data sheet

| | |
|----------------|--|
| P261 | Avoid breathing dust. |
| P264 | Wash face, hands and exposed parts of the body thoroughly after handling. |
| P280 | Wear protective gloves/eye protection. |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P362+P364 | Take off contaminated clothing and wash it before reuse. |
| P403+P233 | Store in a well-ventilated place. Keep container tightly closed. |

Other important information about human health protection

The user is responsible for adherence to all related health protection regulations.

Key to abbreviations and acronyms used in the safety data sheet

| | |
|------------------|---|
| ADR | European agreement concerning the international carriage of dangerous goods by road |
| BCF | Bioconcentration Factor |
| CAS | Chemical Abstracts Service |
| CLP | Regulation (EC) No 1272/2008 on classification, labelling and packaging of substance and mixtures |
| EC | Identification code for each substance listed in EINECS |
| EC ₅₀ | Concentration of a substance when it is affected 50 % of the population |
| EINECS | European Inventory of Existing Commercial Chemical Substances |
| EmS | Emergency plan |
| EU | European Union |
| EuPCS | European Product Categorisation System |
| Eye Irrit. | Eye irritation |
| IATA | International Air Transport Association |
| IBC | International Code For The Construction And Equipment of Ships Carrying Dangerous Chemicals |
| ICAO | International Civil Aviation Organization |
| IMDG | International Maritime Dangerous Goods |
| IMO | International Maritime Organization |
| INCI | International Nomenclature of Cosmetic Ingredients |
| ISO | International Organization for Standardization |
| IUPAC | International Union of Pure and Applied Chemistry |

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| | |
|---------------------|---|
| LC ₅₀ | Lethal concentration of a substance in which it can be expected death of 50% of the population |
| LD ₅₀ | Lethal dose of a substance in which it can be expected death of 50% of the population |
| log K _{ow} | Octanol-water partition coefficient |
| NOAEC | No observed adverse effect concentration |
| NOAEL | No observed adverse effect level |
| NOEL | No observed effect level |
| OEL | Occupational Exposure Limits |
| PBT | Persistent, bioaccumulative and toxic |
| ppm | Parts per million |
| REACH | Registration, Evaluation, Authorisation and Restriction of Chemicals |
| RID | Agreement on the transport of dangerous goods by rail |
| Skin Irrit. | Skin irritation |
| STOT SE | Specific target organ toxicity - single exposure |
| UN | Four-figure identification number of the substance or article taken from the UN Model Regulations |
| UVCB | Substances of unknown or variable composition, complex reaction products or biological materials |
| VOC | Volatile organic compounds |
| vPvB | Very persistent and very bioaccumulative |

Training guidelines

Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the product.

Recommended restrictions of use

not available

Information about data sources used to compile the Safety Data Sheet

REGULATION (EC) No. 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (REACH) as amended. REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Data from the manufacturer of the substance / mixture, if available - information from registration dossiers.

The changes (which information has been added, deleted or modified)

The version 1.3 replaces the SDS version from Monday, 4 September 2023. Changes were made in sections 1, 11 and 16.

Statement

The safety data sheet provides information aimed at ensuring safety and health protection at work and environmental protection. The provided information corresponds to the current status of knowledge and experience and complies with valid legal regulations. The information should not be understood as guaranteeing the suitability and usability of the product for a particular application.