

# Potassium carbonate

## Safety Data Sheet

according to Regulation (EU) 2015/830

Date of issue: 01/06/2022

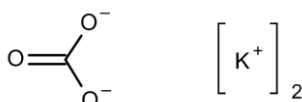
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### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form : Substance  
Substance name : Potassium carbonate  
EC-No. : 209-529-3  
CAS-No. : 584-08-7  
Type of product : Pure substance, Hygroscopic substance. Preventive measures apply to the substance in dry state only  
Formula :  $K_2CO_3$   
Chemical structure :



Synonyms : carbonate of potash / carbonic acid, dipotassium salt / dipotassium carbonate / dipotassium salt carbonic acid / kalium carbonicum / potash (=potassium carbonate) / potassium carbonate, anhydrous

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

##### 1.2.1. Relevant identified uses

Use of the substance/mixture : Industrial use  
Veterinary medicine  
Moisture-repellent compound  
Food industry: additive  
Chemical raw material  
Fertilizer  
Engine coolant  
Cosmetic product: component  
Dyestuff/pigment: component  
Detergent: component  
Agrochemical: raw material  
Laboratory chemical

##### 1.2.2. Uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

ISOLAB Laborgeräte GmbH  
Am Dillhof 2 - 63863 Eschau / GERMANY  
Tel: + 49 93 74 / 978 55-0  
Fax: +49 93 74 / 978 55-29  
[prodsafe@isolab.de](mailto:prodsafe@isolab.de)

#### 1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number	Comment
Germany	Giftnotruf der Charité CBF, Haus VIII (Wirtschaftgebäude), UG	Hindenburgdamm 30 12203 Berlin	+49 30 19240	

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Eye Irrit. 2 H319

STOT SE 3 H335

Skin Irrit. 2 H315

Full text of hazard classes and H-statements : see section 16

##### Adverse physicochemical, human health and environmental effects

No additional information available

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### 2.2. Label elements

#### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS07

Signal word (CLP) :

Warning

Hazard statements (CLP) :

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

Precautionary statements (CLP) :

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.  
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

### 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Name	Product identifier	%
Potassium carbonate	(CAS-No.) 584-08-7 (EC-No.) 209-529-3	100

Full text of H-statements: see section 16

### 3.2. Mixtures

Not applicable

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general

: Check the vital functions. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious with laboured breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital.

First-aid measures after inhalation

: Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.

First-aid measures after skin contact

: Wash immediately with lots of water. Soap may be used. Consult a doctor/medical service. Take victim to a doctor if irritation persists.

First-aid measures after eye contact

: Rinse immediately with plenty of water. Do not apply neutralizing agents. Take victim to an ophthalmologist if irritation persists.

First-aid measures after ingestion

: Rinse mouth with water. Immediately after ingestion: give lots of water to drink. Do not induce vomiting. Call Poison Information Centre ([www.big.be/antigif.htm](http://www.big.be/antigif.htm)). Consult a doctor/medical service if you feel unwell. Ingestion of large quantities: immediately to hospital.

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

Symptoms/effects after inhalation

: AFTER INHALATION OF DUST: Irritation of the respiratory tract. Irritation of the nasal mucous membranes. Dry/sore throat. Coughing.

Symptoms/effects after skin contact

: Tingling/irritation of the skin.

Symptoms/effects after eye contact

: Irritation of the eye tissue. Redness of the eye tissue.

Symptoms/effects after ingestion

: AFTER ABSORPTION OF HIGH QUANTITIES: Vomiting. Nausea. Abdominal pain. Diarrhoea.

Chronic symptoms

: ON CONTINUOUS/REPEATED EXPOSURE/CONTACT: Skin rash/inflammation. Possible inflammation of the respiratory tract.

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

No additional information available

## SECTION 5: Fire-fighting measures

### 5.1. Extinguishing media

Suitable extinguishing media

: Adapt extinguishing media to the environment.

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Unsuitable extinguishing media : No unsuitable extinguishing media known.

### 5.2. Special hazards arising from the substance or mixture

Fire hazard : DIRECT FIRE HAZARD. Non combustible. INDIRECT FIRE HAZARD. Reactions involving a fire hazard: see "Reactivity Hazard".

Explosion hazard : DIRECT EXPLOSION HAZARD. Fine dust is explosive with air. INDIRECT EXPLOSION HAZARD. Reactions with explosion hazards: see "Reactivity Hazard". Dust cloud can be ignited by a spark.

### 5.3. Advice for firefighters

Precautionary measures fire : Exposure to fire/heat: keep upwind. Exposure to fire/heat: have neighbourhood close doors and windows.

Firefighting instructions : Cool tanks/drums with water spray/remove them into safety.

Protection during firefighting : Heat/fire exposure: compressed air/oxygen apparatus.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

Protective equipment : Gloves. Face-shield. Protective clothing. Dust cloud production: compressed air/oxygen apparatus. Dust cloud production: dust-tight suit. See "Material-Handling" to select protective clothing.

Emergency procedures : Mark the danger area. Prevent dust cloud formation, e.g. by wetting. No naked flames. Wash contaminated clothes.

Measures in case of dust release : In case of dust production: keep upwind. Dust production: have neighbourhood close doors and windows. Dust production: stop engines and no smoking. In case of dust production: no naked flames or sparks. Dust: spark-/explosionproof appliances/lighting equipment.

#### 6.1.2. For emergency responders

No additional information available

### 6.2. Environmental precautions

No additional information available

### 6.3. Methods and material for containment and cleaning up

For containment : Contain released substance, pump into suitable containers. Consult "Material-handling" to select material of containers. Plug the leak, cut off the supply. Knock down/dilute dust cloud with water spray. Powdered form: no compressed air for pumping over spills.

Methods for cleaning up : Prevent dust cloud formation. Scoop solid spill into closing containers. Powdered: do not use compressed air for pumping over spills. See "Material-handling" for suitable container materials. Clean contaminated surfaces with an excess of water. Wash clothing and equipment after handling.

### 6.4. Reference to other sections

No additional information available

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Comply with the legal requirements. Remove contaminated clothing immediately. Clean contaminated clothing. Thoroughly clean/dry the installation before use. Powdered form: no compressed air for pumping over. Avoid raising dust. Use earthed equipment. Keep away from naked flames/heat. Finely divided: spark- and explosionproof appliances. Finely divided: keep away from ignition sources/sparks. Observe normal hygiene standards. Keep container tightly closed. Carry operations in the open/under local exhaust/ventilation or with respiratory protection.

### 7.2. Conditions for safe storage, including any incompatibilities

Heat and ignition sources : KEEP SUBSTANCE AWAY FROM: heat sources. ignition sources.

Information on mixed storage : KEEP SUBSTANCE AWAY FROM: oxidizing agents. (strong) acids. halogens. water/moisture.

Storage area : Store in a dry area. Keep container in a well-ventilated place. Keep only in the original container. Meet the legal requirements. Store only in a dilute solution.

Special rules on packaging : SPECIAL REQUIREMENTS: closing. watertight. dry. clean. correctly labelled. meet the legal requirements. Secure fragile packagings in solid containers.

Packaging materials : SUITABLE MATERIAL: stainless steel. nickel. MATERIAL TO AVOID: aluminium. zinc. lead. copper. bronze.

### 7.3. Specific end use(s)

No additional information available

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### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

Potassium carbonate (584-08-7)		
Latvia	Local name	Kālijakarbonāts
Latvia	OEL TWA (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
Lithuania	Local name	Kalio karbonatas
Lithuania	IPRV (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
Russian Federation	Local name	диКалий карбонат
Russian Federation	OEL Ceiling (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
Russian Federation	Remark (RU)	3 класс опасности - опасное; а (аэрозоль)

#### 8.2. Exposure controls

##### Materials for protective clothing:

GIVE EXCELLENT RESISTANCE: No data available. GIVE GOOD RESISTANCE: nitrile rubber. GIVE LESS RESISTANCE: No data available.  
GIVE POOR RESISTANCE: No data available

##### Hand protection:

Gloves

##### Eye protection:

Face shield. In case of dust production: protective goggles

##### Skin and body protection:

Protective clothing. In case of dust production: head/neck protection. In case of dust production: dustproof clothing

##### Respiratory protection:

Dust production: dust mask with filter type P2

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Crystalline solid. Crystalline powder. Granular powder. Grains.
Molecular mass	: 138.21 g/mol
Colour	: Colourless to white.
Odour	: Odourless.
Odour threshold	: No data available
pH	: 11.5 - 12.5 (50 g/l, H <sub>2</sub> O, 20 °C)
pH solution	: 5 %
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: 891 °C
Freezing point	: No data available
Boiling point	: No data available
Flash point	: Not applicable
Auto-ignition temperature	: No data available
Decomposition temperature	: 891 °C
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: 2.2
Density	: 2.43 g/cm <sup>3</sup> (20 °C)
Solubility	: Soluble in water. Water: 112 g/100ml
Log Pow	: No data available
Viscosity, kinematic	: No data available

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Viscosity, dynamic : No data available  
Explosive properties : No data available  
Oxidising properties : No data available  
Explosive limits : No data available

### 9.2. Other information

VOC content : Not applicable  
Other properties : Translucent. Hygroscopic. Substance has basic reaction.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

On exposure to temperature rise: pressure rise and possible bursting of container. Upon combustion: CO and CO<sub>2</sub> are formed. Reacts violently with (strong) oxidizers: (increased) risk of fire. Reacts exothermically with (some) acids: release of carbon dioxide.

### 10.2. Chemical stability

Hygroscopic.

### 10.3. Possibility of hazardous reactions

No additional information available

### 10.4. Conditions to avoid

No additional information available

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

No additional information available

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Not classified

Potassium carbonate (584-08-7)	
LD50 oral rat	> 2000 mg/kg (Rat)

Skin corrosion/irritation : Causes skin irritation.  
pH: 11.6 (10 %)  
Serious eye damage/irritation : Causes serious eye irritation.  
pH: 11.6 (10 %)  
Respiratory or skin sensitisation : Not classified  
Germ cell mutagenicity : Not classified  
Carcinogenicity : Not classified  
Reproductive toxicity : Not classified  
STOT-single exposure : May cause respiratory irritation.  
STOT-repeated exposure : Not classified  
Aspiration hazard : Not classified

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - air : Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009). Not included in the list of fluorinated greenhouse gases (Regulation (EC) No 842/2006). TA-Luft Klasse 5.2.1.  
Ecology - water : Ground water pollutant. Harmful to fishes. Slightly harmful to invertebrates (Daphnia) (EC50 (48h): 100 - 1000 mg/l). pH shift.

Potassium carbonate (584-08-7)	
LC50 fish 1	200 mg/l (LC50; 72 h; Pisces)
LC50 fish 2	68 mg/l (LC50; FIFRA 72-1; 96 h; Oncorhynchus mykiss; Flow-through system; Fresh water; Experimental value)
EC50 Daphnia 1	200 mg/l (EC50; FIFRA 72-1; 48 h; Daphnia pulex; Static system; Fresh water; Experimental value)

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<b>Potassium carbonate (584-08-7)</b>	
EC50 Daphnia 2	120 mg/l (NOEC; FIFRA 72-1; 48 h; Daphnia pulex; Static system; Fresh water; Experimental value)

### 12.2. Persistence and degradability

<b>Potassium carbonate (584-08-7)</b>	
Persistence and degradability	Biodegradability: not applicable. No (test)data on mobility of the substance available.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable

### 12.3. Bioaccumulative potential

<b>Potassium carbonate (584-08-7)</b>	
Bioaccumulative potential	Bioaccumulation: not applicable.

### 12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Product/Packaging disposal recommendations : Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Should not be landfilled with household waste. Recycle/reuse. Do not discharge into the sewer. Do not discharge into surface water.

Additional information : LWCA (the Netherlands): KGA category 05. Hazardous waste according to Directive 2008/98/EC.

European List of Waste (LoW) code : 06 02 05\* - other bases

## SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
<b>14.1. UN number</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.2. UN proper shipping name</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.3. Transport hazard class(es)</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.4. Packing group</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.5. Environmental hazards</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
No supplementary information available				

### 14.6. Special precautions for user

#### - Overland transport

Not applicable

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### - Transport by sea

Not applicable

### - Air transport

Not applicable

### - Inland waterway transport

Not applicable

### - Rail transport

Not applicable

## 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

## SECTION 15: Regulatory information

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

#### 15.1.1. EU-Regulations

No REACH Annex XVII restrictions

Potassium carbonate is not on the REACH Candidate List

Potassium carbonate is not on the REACH Annex XIV List

VOC content : Not applicable

#### 15.1.2. National regulations

##### Germany

VwVwS Annex reference : Water hazard class (WGK) 1, low hazard to waters (Classification according to VwVwS, Annex 1 or 2; ID No. 337)

WGK remark : Classification water polluting in compliance with Verwaltungsvorschrift wassergefährdender Stoffe (VwVwS) of 27 July 2005 (Anhang 2)

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

##### Netherlands

SZW-lijst van kankerverwekkende stoffen : The substance is not listed

SZW-lijst van mutagene stoffen : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : The substance is not listed

##### Denmark

Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use the product

### 15.2. Chemical safety assessment

No additional information available

## SECTION 16: Other information

Abbreviations and acronyms:

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
EC50	Median effective concentration
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association

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IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
PBT	Persistent Bioaccumulative Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
vPvB	Very Persistent and Very Bioaccumulative

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Full text of H- and EUH-statements:	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation

SDS ISOLAB

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product*