Potassium bicarbonate 99+% Foodgrade

article number: KHCO3

Version: 2.0 en

Replaces version of: 2015-07-17

Version: (1)

Laboratoriumdiscounter

date of compilation: 2015-07-17

Revision: 2020-08-25

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

1.1 **Product identifier**

Identification of the substance Potassium bicarbonate

Article number KHCO3

Registration number (REACH) 01-2119532640-48-xxxx

EC number 206-059-0 CAS number 298-14-6

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

Identified uses: laboratory chemical

laboratory and analytical use

1.3 Details of the supplier of the safety data sheet

Laboratoriumdiscounter Zandvoortstraat 75 1976BN Ijmuiden Nederland

Telephone: +31 (0) 255 700 210 e-mail: info@laboratoriumdiscounter.nl Website: www.laboratoriumdiscounter.nl

Competent person responsible for the safety data

sheet:

: Department Health, Safety and Environment

e-mail (competent person): info@laboratoriumdiscounter.nl

1.4 **Emergency telephone number**

Name	Street	Postal code/city	Telephone	Website
National Poisons In- formation Service City Hospital	Dudley Rd	B187QH Birmingham	844 892 0111	

Emergency information service +49/(0)89 19240

SECTION 2: Hazards identification

1. Classification of the substance ormixture

Classification according to Regulation (EC) No 1272/2008 (CLP)

This substance does not meet the criteria for classification in accordance with Regulation No 1272/ 2008/EC.

2. Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP)

not required

United Kingdom (en) Page 1 / 12

Potassium bicarbonate 99+% Foodgrade

article number: KHCO3

<u>Signal word</u> not required

2.3 Other hazards

There is no additional information.

SECTION 3: Composition/information on ingredients

3.1 Substances

Name of substance Potassium bicarbonate

Registration number (REACH) 01-2119532640-48-xxxx

EC number 206-059-0 CAS number 298-14-6 Molecular formula $KHCO_3$ Molar mass 100,1 g/mol

SECTION 4: First aid measures

4.1 Description of first aid measures



General notes

Take off contaminated clothing.

Following inhalation

Provide fresh air. In all cases of doubt, or when symptoms persist, seek medical advice.

Following skin contact

Rinse skin with water/shower.

Following eye contact

Rinse cautiously with water for several minutes. In all cases of doubt, or when symptoms persist, seek medical advice.

Following ingestion

Rinse mouth. Call a doctor if you feel unwell.

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

Symptoms and effects are not known to date

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

none

United Kingdom (en) Page 2 / 12

Potassium bicarbonate 99+% Foodgrade

article number: KHCO3

SECTION 5: Firefighting measures

5.1 Extinguishing media



Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings water spray, foam, dry extinguishing powder, carbon dioxide (CO₂)

Unsuitable extinguishing media

water jet

2. Special hazards arising from the substance or mixture

Non-combustible.

Hazardous combustion products

in case of fire and/or explosion do not breathe fumes

3. Advice for firefighters

Fight fire with normal precautions from a reasonable distance. Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures



For non-emergency personnel

No special measures are necessary.

2. Environmental precautions

Keep away from drains, surface and ground water.

3. Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains.

Advice on how to clean up a spill

Take up mechanically.

Other information relating to spills and releases

Place in appropriate containers for disposal.

4. Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

United Kingdom (en) Page 3 / 12

Potassium bicarbonate 99+% Foodgrade

article number: KHCO3

SECTION 7: Handling and storage

1. Precautions for safe handling

No special measures are necessary.

Advice on general occupational hygiene

Keep away from food, drink and animal feedingstuffs.

2. Conditions for safe storage, including anyincompatibilities

Store in a dry place.

Incompatible substances or mixtures

Observe hints for combined storage.

Consideration of other advice

Ventilation requirements

Use local and general ventilation.

· Specific designs for storage rooms or vessels

Recommended storage temperature: 15 - 25 °C.

3. Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

1. Control parameters

National limit values

Occupational exposure limit values (Workplace Exposure Limits)

Data are not available.

2. Exposure controls

Individual protection measures (personal protective equipment)

Eye/face protection



Use safety goggle with side protection.

Skin protection



hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374.

type of material

NBR (Nitrile rubber)

· material thickness

>0,11 mm

United Kingdom (en) Page 4 / 12

Potassium bicarbonate 99+% Foodgrade

article number: KHCO3

· breakthrough times of the glove material

>480 minutes (permeation: level 6)

other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended.

Respiratory protection





Respiratory protection necessary at: Dust formation. Particulate filter device (EN 143). P1 (filters at least 80 % of airborne particles, colour code: White).

Environmental exposure controls

Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state solid (powder, crystalline)

Colour colourless - white

Odour odourless

Odour threshold No data available

Other physical and chemical parameters

pH (value) 8 - 9 (water: 50 ^g/_I, 20 °C)

Melting point/freezing point 100 °C at 1.013 hPa (slow decomposition)

Initial boiling point and boiling range This information is not available.

Flash point not applicable

Evaporation rate no data available

Flammability(solid, gas)

These information are not available

Explosive limits

·lower explosion limit (LEL)
 · upper explosion limit (UEL)
 this information is not available
 this information are not available
 Vapour pressure
 This information is not available.

Density $2,17 \text{ g/cm}^3 \text{ at } 20 ^{\circ}\text{C}$

Vapour density This information is not available.

Relative density Information on this property is not available.

Solubility(ies)

Water solubility 362 g/_{1} at $25 ^{\circ}\text{C}$

United Kingdom (en) Page 5 / 12

Potassium bicarbonate 99+% Foodgrade

article number: KHCO3

Partition coefficient

n-octanol/water (log KOW)

This information is not available.

Auto-ignition temperature Information on this property is not available.

Decomposition temperature >100 °C (ECHA)

Viscosity not relevant (solid matter)

Explosive properties Shall not be classified as explosive

Oxidising properties none

9.2 Other information

There is no additional information.

SECTION 10: Stability and reactivity

1. Reactivity

This material is not reactive under normal ambient conditions.

2. Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

3. Possibility of hazardous reactions

Violent reaction with: Strong acid

4. Conditions to avoid

Keep away from heat. Decompostion takes place from temperatures above: >100 °C.

5. Incompatible materials

There is no additional information.

6. Hazardous decomposition products

Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Shall not be classified as acutely toxic.

Exposure route	Endpoint	Value	Species	Source
oral	LD50	>2.000 ^{mg} /kg	rat	ECHA
dermal	LD50	>2.000 ^{mg} / _{kg}	rabbit	ECHA

Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation

Shall not be classified as seriously damaging to the eye or eye irritant.

Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

United Kingdom (en) Page 6 / 12

Potassium bicarbonate 99+% Foodgrade

article number: KHCO3

Summary of evaluation of the CMR properties

Shall not be classified as germ cell mutagenic, carcinogenic nor as a reproductive toxicant

· Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

· Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

Symptoms related to the physical, chemical and toxicological characteristics

If swallowed

data are not available

If in eyes

data are not available

If inhaled

data are not available

· If on skin

data are not available

Other information

Health effects are not known, This information is based upon the present state of our knowledge

SECTION 12: Ecological information

12.1 Toxicity

acc. to 1272/2008/EC: Shall not be classified as hazardous to the aquatic environment.

Aquatic toxicity (acute)

Endpoint	Value	Species	Source	Exposure time
LC50	1.300 ^{mg} /ı	fish	ECHA	96 h
EC50	630 ^{mg} / _l	aquatic invertebrates	ECHA	48 h

2. Process of degradability

The methods for determining the biological degradability are not applicable to inorganic substances.

Theoretical Oxygen Demand: -0,1598 $^{mg}/_{mg}$ Theoretical Carbon Dioxide: 0,4396 $^{mg}/_{mg}$

3. Bioaccumulative potential

Data are not available.

4. Mobility in soil

Data are not available.

5. Results of PBT and vPvB assessment

Data are not available.

6. Other adverse effects

Data are not available.

United Kingdom (en) Page 7 / 12

Potassium bicarbonate 99+% Foodgrade

article number: KHCO3

SECTION 13: Disposal considerations

13.1 Waste treatment methods



Consult the appropriate local waste disposal expert about waste disposal.

Sewage disposal-relevant information

Do not empty into drains.

2. Relevant provisions relating to waste

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

3. Remarks

Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities. Please consider the relevant national or regional provisions.

SECTION 14: Transport information

	•	
1.	UN number	(not subject to transport regulations)
2.	UN proper shipping name	not relevant
3.	Transport hazard class(es)	notrelevant
	Class	-
4.	Packing group	not relevant not assigned to a packing group
5.	Environmental hazards	none (non-environmentally hazardous acc. to the dangerous goods regulations)
•	0	

6. Special precautions for user

There is no additional information.

7. Transport in bulk according to Annex II of MARPOL and the IBC Code

The cargo is not intended to be carried in bulk.

8. Information for each of the UN Model Regulations

• Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)

Not subject to ADR, RID and ADN.

International Maritime Dangerous Goods Code (IMDG)

Not subject to IMDG.

International Civil Aviation Organization (ICAO-IATA/DGR)

Not subject to ICAO-IATA.

United Kingdom (en) Page 8 / 12

Potassium bicarbonate 99+% Foodgrade

article number: KHCO3

SECTION 15: Regulatory information

- 1. Safety, health and environmental regulations/legislation specific for the substance or mixture Relevant provisions of the European Union (EU)
 - Regulation 649/2012/EU concerning the export and import of hazardous chemicals (PIC)
 Not listed.
 - Regulation 1005/2009/EC on substances that deplete the ozone layer (ODS)
 Not listed.
 - Regulation 850/2004/EC on persistent organic pollutants (POP)

Not listed.

Restrictions according to REACH, Annex XVII

not listed

· Restrictions according to REACH, Title VIII

None.

- List of substances subject to authorisation (REACH, Annex XIV)/SVHC candidate list not listed
- Seveso Directive

2012/	2012/18/EU (Seveso III)			
No	No Dangerous substance/hazard categories Qualifying quantity (tonnes) for the application of lower and upper-tier requirements		Notes	
	not assigned			

Directive 75/324/EEC relating to aerosol dispensers

Filling batch

Deco-Paint Directive (2004/42/EC)

VOC content	0% 0 ⁹ / ₁
Directive on industrial emissions (VOCs, 2010/75	5/EU)
VOC content	0 %
VOC content	0 g/I

Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS) - Annex II

not listed

Regulation 166/2006/EC concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

not listed

Directive 2000/60/EC establishing a framework for Community action in the field of water policy (WFD)

not listed

Regulation 98/2013/EU on the marketing and use of explosives precursors

not listed

United Kingdom (en) Page 9 / 12

Potassium bicarbonate 99+% Foodgrade

article number: KHCO3

Regulation 111/2005/EC laying down rules for the monitoring of trade between the Community and third countries in drug precursors

not listed

National inventories

Substance is listed in the following national inventories:

Country	National inventories	Status
AU	AICS	substance is listed
CA	DSL	substance is listed
CN	IECSC	substance is listed
EU	ECSI	substance is listed
EU	REACH Reg.	substance is listed
JP	CSCL-ENCS	substance is listed
KR	KECI	substance is listed
MX	INSQ	substance is listed
NZ	NZIoC	substance is listed
PH	PICCS	substance is listed
TW	TCSI	substance is listed
US	TSCA	substance is listed

Legend

AICS Australian Inventory of Chemical Substances

CSCL-ENCS List of Existing and New Chemical Substances (CSCL-ENCS)
DSL Domestic Substances List(DSL)
ECSI EC Substance Inventory (EINECS, FLINCS, NLP)

Inventory of Existing Chemical Substances Produced or Imported in China

Inventory of Existing Chemical Substances Produced or Important National Inventory of Chemical Substances
KECI Korea Existing Chemicals Inventory
NZIOC New Zealand Inventory of Chemicals
PICCS Philippine Inventory of Chemicals and Chemical Substances
REACH Reg. REACH registered substances
TCSI Taiwan Chemical Substance Inventory
TSCA Toxic Substance Control Act

15.2 **Chemical Safety Assessment**

No Chemical Safety Assessment has been carried out for this substance.

SECTION 16: Other information

Indication of changes (revised safety data sheet)

Section	Former entry (text/value)	Actual entry (text/value)	Safety- relev- ant
8.1	Occupational exposure limit values (Workplace Exposure Limits): not relevant	Occupationalexposurelimit values(Workplace Exposure Limits): Data are not available.	yes
14.4	Packing group: not relevant	Packing group: not relevant not assigned to a packing group	yes
14.8		· International Civil Aviation Organization (ICAO-IATA/DGR): Not subject to ICAO-IATA.	yes

United Kingdom (en) Page 10 / 12

Potassium bicarbonate 99+% Foodgrade

article number: KHCO3

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
CMR	Carcinogenic, Mutagenic or toxic for Reproduction
DGR	Dangerous Goods Regulations (see IATA/DGR)
EC50	Effective Concentration 50%. The EC50 corresponds to the concentration of a tested substance causing 50% changes in response (e.g. on growth) during a specified time interval
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50% lethality during a specified time interval
LD50	Lethal Dose 50%: the LD50 corresponds to the dose of a tested substance causing 50% lethality during a specified time interval
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
NLP	No-Longer Polymer
PBT	Persistent, Bioaccumulative and Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
SVHC	Substance of Very High Concern
VOC	Volatile Organic Compounds
vPvB	very Persistent and very Bioaccumulative

Key literature references and sources for data

- Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU Regulation (EC) No. 1272/2008 (CLP, EU GHS) Dangerous Goods Regulations (DGR) for the air transport (IATA)

- International Maritime Dangerous Goods Code (IMDG)

List of relevant phrases (code and full text as stated in chapter 2 and 3)

not relevant.

United Kingdom (en) Page 11 / 12

Potassium bicarbonate 99+% Foodgrade

article number: KHCO3

Disclaimer

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

United Kingdom (en) Page 12 / 12