

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

Natriumbicarbonat DAB

Version number: 6.0 Replaces version of: 2012-11-21 (5) Revision: 2016-02-29 First version: 06.04.2006

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

| 1.1 | Product identifier | | | | |
|------|---|--|--|--|--|
| | Trade name | Natriumbicarbonat DAB | | | |
| | Registration number (REACH) | 01-2119457606-32-XXXX | | | |
| | EC number | 205-633-8 | | | |
| | CAS number | 144-55-8 | | | |
| 1.2 | Relevant identified uses of the substance or mixture and uses advised against | | | | |
| | Relevant identified uses | General use | | | |
| 1.3 | Details of the supplier of the safety data sheet | | | | |
| | BERGCHEMIE J.C.Bröcking & Co. GmbH Rudolfstrasse 14 42285 Wuppertal Germany | Telephone: ++49 (0) 202 - 45 60 60 Telefax: ++49 (0) 202 / 44 79 32 | | | |
| | E-mail address of competent person responsible for the SDS | sdb@csb-online.de | | | |
| | Please do not use this e-mail adress to ask for the BERGCHEMIE J.C.Bröcking & Co. GmbH. | he latest safety data sheet. For this purpose contact | | | |
| 1.4 | Emergency telephone number | | | | |
| | As above or next toxicological information cent | re. | | | |
| SECT | ION 2: Hazards identification | | | | |
| 2.1 | Classification of the substance or mixture | 2 | | | |

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.

Additional information

According to the results of its assessment, this substance is not a PBT or a vPvB.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP) not required

2.3 Other hazards

There is no additional information.

Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB.

SECTION 3: Composition/information on ingredients

3.1 Substances

| Name of substance | sodium hydrogencarbonate |
|-------------------|-------------------------------------|
| Identifiers | |
| CAS No | 144-55-8 |
| EC No | 205-633-8 |
| Molecular formula | CH2O3.Na |
| Molar mass | 84.01 ^g / _{mol} |
| | |

SECTION 4: First aid measures

4.1 Description of first aid measures

General notes

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

Following inhalation

Provide fresh air.

Following skin contact

Wash with plenty of soap and water.

Following eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Following ingestion

Rinse mouth. Do not induce vomiting. Get medical advice/attention if you feel unwell.

Notes for the doctor

none

4.2 Most important symptoms and effects, both acute and delayed

Symptoms and effects are not known to date.

4.3 Indication of any immediate medical attention and special treatment needed none

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

water, foam, alcohol resistant foam, fire extinguishing powder, carbon dioxide (CO2)

Unsuitable extinguishing media

water jet

5.2 Special hazards arising from the substance or mixture

Hazardous decomposition products: Section 10.

Hazardous combustion products

carbon monoxide (CO), carbon dioxide (CO2)

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

Special protective equipment for firefighters

self-contained breathing apparatus (EN 133)

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Ventilate affected area.

Wearing of suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing.

For emergency responders

Wear breathing apparatus if exposed to vapours/dust/spray/gases.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose it.

6.3 Methods and material for containment and cleaning up

Advices on how to contain a spill

take up mechanically

Advices on how to clean up a spill

Take up mechanically. Collect spillage.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 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.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation.

Specific notes/details

Dust deposits may accumulate on all deposition surfaces in a technical room.

Measures to protect the environment

Avoid release to the environment.

Advice on general occupational hygiene

Do not to eat, drink and smoke in work areas. Wash hands after use. Preventive skin protection (barrier creams/ointments) is recommended. Remove contaminated clothing and protective equipment before entering eating areas. Do not breathe dust. Avoid contact with skin and eyes.

7.2 Conditions for safe storage, including any incompatibilities

Explosive atmospheres

Not explosive.

Flammability hazards

None.

Incompatible substances or mixtures

Incompatible materials: see section 10.

Protect against external exposure, such as

heat, humidity

Consideration of other advice

Keep away from food, drink and animal feedingstuffs.

Ventilation requirements

Provision of sufficient ventilation.

Packaging compatibilities

Keep only in original container.

7.3 Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

No data available.

| Occupational exposure limit values (Workplace Exposure Limits) | | | | | | | | | |
|--|----------------|----------|---------------|-----------------|--------------|----------------|---------------|-----------------|------------|
| Coun- try | Name of agent | CAS No | Nota- tion | Identi- fier | TWA [ppm] | TWA [mg/m³] | STEL [ppm] | STEL [mg/m³] | Source |
| EU | carbon dioxide | 124-38-9 | | IOELV | 5,000 | 9,000 | | | 2006/15/EC |
| GB | carbon dioxide | 124-38-9 | | WEL | 5,000 | 9,150 | 15,000 | 27,400 | EH40/2005 |

Notation

STEL short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period unless otherwise specified

TWA time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average

8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Wear eye/face protection.

Hand protection

| Material | Material thickness | Breakthrough times of the glove material |
|---|--|--|
| IIR: isobutene-isoprene (butyl) rub- ber | these information are not available | these information are not available |
| NBR: acrylonitrile-butadiene rubber | these information are not available | these information are not available |

Wear suitable gloves.

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

Check leak-tightness/impermeability prior to use.

In the case of wanting to use the gloves again, clean them before taking off and air them well. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Respiratory protection

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

Environmental exposure controls

Use appropriate container to avoid environmental contamination. 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 |
| Form | powder |
| Colour | white |
| Odour | odourless |
| Odour threshold | these information are not available |
| Other safety parameters | |
| pH (value) | 8.1 - 8.4 (water: 50 ^g / _l , 20 °C) |
| Melting point/freezing point | these information are not available |
| Initial boiling point and boiling range | these information are not available |
| Flash point | not applicable |
| Evaporation rate | these information are not available |
| Flammability (solid, gas) | non-flammable |
| Explosion limits of dust clouds | not determined |
| Vapour pressure | these information are not available |
| Density | 2.2 ^g / _{cm³} |
| | |

Natriumbicarbonat DAB

| Vapour density | these information are not available |
|---------------------------|---|
| Bulk density | 700 - 1,150 ^{kg} / _{m³} |
| Relative density | these information are not available |
| Solubility(ies) | |
| Water solubility | 95 ^g / _l at 20 °C, not miscible in any proportion |
| Partition coefficient | |
| n-octanol/water (log KOW) | these information are not available |
| Auto-ignition temperature | these information are not available |
| Decomposition temperature | >50 °C |
| Viscosity | not relevant |
| Kinematic viscosity | these information are not available |
| Dynamic viscosity | these information are not available |
| Explosive properties | not explosive |
| Oxidising properties | shall not be classified as oxidising |

SECTION 10: Stability and reactivity

10.1 Reactivity

This material is not reactive under normal ambient conditions.

10.2 Chemical stability

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

10.3 Possibility of hazardous reactions

Reacts with acids under vigorous gas release. Danger of splashing of acid.

10.4 Conditions to avoid

Keep away from heat. Humidity.

10.5 Incompatible materials

acids

10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known.

Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Classification according to GHS (1272/2008/EC, CLP)

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

Acute toxicity

Shall not be classified as acutely toxic.

| Acute toxicity | | | | | | |
|--------------------------|----------|---|---------|--------|---|--|
| Exposure route | Endpoint | Value | Species | Method | Source | |
| oral | LD50 | >4,000 ^{mg} / _{kg} | rat | | European Chem- icals Agency, ht- tp://echa.europa. eu/ | |
| inhalation: dust/mist | LC50 | >4,740 ^{mg} / _l /4h | rat | | | |

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.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

Shall not be classified 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.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity (acute)

Based on available data, the classification criteria are not met.

| Aquatic toxicity (acute) | | | | | |
|--------------------------|---------------------------|-----------------------------------|--------|---|---------------|
| Endpoint | Value | Species | Method | Source | Exposure time |
| LC50 | 7,100 ^{mg} /l | bluegill (lepomis macrochirus) | | European Chemicals Agency, http://echa.europa.eu/ | 96 hours |
| EC50 | 4,100 ^{mg} /l | daphnia magna | | European Chemicals Agency, http://echa.europa.eu/ | 48 hours |

Aquatic toxicity (chronic)

No data available.

12.2 Persistence and degradability

Biodegradation

The study does not need to be conducted because the substance is inorganic.

Persistence

The study does not need to be conducted because the substance is inorganic.

12.3 Bioaccumulative potential

Data are not available.

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB.

12.6 Other adverse effects

Data are not available.

Endocrine disrupting potential

Not listed.

Remarks

Water hazard class - WHC (Wassergefährdungsklasse): 1 (Slightly hazardous to water)

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Dispose of contents/container in accordance with local/regional/national/international regulations.

Sewage disposal-relevant information

Do not empty into drains.

Waste treatment of containers/packagings

Handle contaminated packages in the same way as the substance itself.

Remarks

Please consider the relevant national or regional provisions.

SECTION 14: Transport information

14.1 UN number

not subject to transport regulations

- 14.2 UN proper shipping name
- 14.3 Transport hazard class(es)

Class

- 14.4 Packing group
- 14.5 Environmental hazards
- **14.6** Special precautions for user There is no additional information.
- **14.7** Transport in bulk according to Annex II of MARPOL and the IBC Code The cargo is not intended to be carried in bulk.

SECTION 15: Regulatory information

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

Relevant provisions of the European Union (EU)

Restrictions according to REACH, Annex XVII

not listed

List of substances subject to authorisation (REACH, Annex XIV)

not listed

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

Explosives precursors which are subject to restrictions

not listed

SECTION 16: Other information

Indication of changes (revised safety data sheet)

Indication of changes: Section -

Abbreviations and acronyms

Abbreviations and acronyms

| Abbr. | Descriptions of used abbreviations |
|------------|---|
| 2006/15/EC | Comission Directive establishing a second list of indicative occupational exposure limit values in imple- mentation of Council Directive 98/24/EC and amending Directives 91/322/EEC and 2000/39/EC |
| ADN | Accord européen relatif au transport international des marchandises dangereuses par voies de naviga- tion intérieures (European Agreement concerning the International Carriage of Dangerous Goods by In- land 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 |
| DGR | danger |
| EC No | The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an iden- tifier of substances commercially available within the EU (European Union) |
| EH40/2005 | EH40/2005 Workplace exposure limits (http://www.nationalarchives.gov.uk/doc/open-government-li- cence/) |
| GHS | "Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Na- tions |
| IATA | International Air Transport Association |
| IMDG | International Maritime Dangerous Goods Code |
| IOELV | indicative occupational exposure limit value |
| MARPOL | International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant) |
| PBT | Persistent, Bioaccumulative and Toxic |

| Abbreviations and acronyms | | | | |
|----------------------------|--|--|--|--|
| Abbr. | Descriptions of used abbreviations | | | |
| ppm | parts per million | | | |
| REACH | Registration, Evaluation, Authorisation and Restriction of Chemicals | | | |
| RID | Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regula- tions concerning the International carriage of Dangerous goods by Rail) | | | |
| STEL | short-term exposure limit | | | |
| TWA | time-weighted average | | | |
| vPvB | very Persistent and very Bioaccumulative | | | |
| WEL | workplace exposure limit | | | |

Key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU. Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

Responsible for the safety data sheet

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Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.