

## Material safety data sheet

According to EU Regulation 1907/2006 in the current version

### SODIUM BICARBONATE

#### 1. Identification of the substance/mixture and company

Trade name: Sodium bicarbonate  
CAS No. : 144-55-8  
EC No. : 205-633-8  
REACH pre-registration No. : 01-2119457606-32-xxxx  
Utilization: Raw material for cosmetic products  
Supplier company identification: Elemental SRL, Piața Cazărmii no.15, 410188-Oradea, jud.Bihor, Romania  
Tel/Fax: +40259-436.755, [www.ellemental.com](http://www.ellemental.com)  
Emergency: RO: număr național pentru cazuri de urgență: 021 3183606 Institutul de Sănătate Publică București.  
International emergency number: +49 180 2273-112

#### 2. Hazards Identification

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

Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.

##### 2.2 Label elements

No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required

##### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

##### Ecological information:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

##### Toxicological information:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

#### 3. Declaration of ingredients

##### 3.1 Substances

Synonyms : Sodium hydrogen carbonate

Formula :  $\text{CHNaO}_3$

Molecular weight : 84,02 g/mol

No components need to be disclosed according to the applicable regulations

##### 3.2. Mixtures

N.A.

#### 4. First aid measures

##### 4.1 Description of first-aid measures

If inhaled

After inhalation: fresh air.

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In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

In case of eye contact

After eye contact: rinse out with plenty of water. Remove contact lenses.

If swallowed

After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.

4.2 Most important symptoms and effects, both acute and delayed

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

4.3 Indication of any immediate medical attention and special treatment needed

No data available

## 5. Fire fighting measures

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5.1 Extinguishing media

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Carbon oxides Sodium oxides Not combustible.

Ambient fire may liberate hazardous vapours.

5.3 Advice for firefighters

In the event of fire, wear self-contained breathing apparatus.

5.4 Further information

Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

## 6. Accidental release measures

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6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts. Evacuate the danger area, observe emergency procedures, consult an expert.

For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

For disposal see section 13.

## 7. Handling and storage

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7.1 Precautions for safe handling

For precautions see section 2.2.

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

Storage conditions

Tightly closed. Dry.

Storage class

Storage class (TRGS 510): 13: Non Combustible Solids

#### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

### 8. Exposure controls / personal protection

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#### 8.1. Exposure Limit Values

Sodium bicarbonate

TWA = 10 mg/m<sup>3</sup>

#### 8.2. Exposure controls

- Ensure adequate ventilation.
- Provide appropriate exhaust ventilation at places where dust is formed.
- Refer to protective measures listed in sections 7 and 8.
- Apply technical measures to comply with the occupational exposure limits.

##### 8.2.1. Occupational exposure controls

###### 8.2.1.1. Respiratory protection

- Use only respiratory protection that conforms to international/ national standards.
- In case of dust clouds/fog/fumes, dust mask type P1.

###### 8.2.1.2. Hand protection

- Wear suitable gloves.

###### 8.2.1.3. Eye protection

- Dust proof goggles, if dusty.

###### 8.2.1.4. Skin and body protection

- None.

###### 8.2.1.5. Hygiene measures

- When using do not eat, drink or smoke.
- Wash hands before breaks and at the end of workday.
- Handle in accordance with good industrial hygiene and safety practice.

##### 8.2.2. Environmental exposure controls

- Dispose of rinse water in accordance with local and national regulations

### 9. Physical and chemical properties

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#### 9.1. General Information (appearance, odour)

Appearance : crystalline, powder

Colour : white

Odour : odourless

#### 9.2. Important health safety and environmental information

pH : 8.6

Concentration: 52 g/l

Boiling point/range : Remarks: not applicable, Thermal decomposition

Flash point : Remarks: not applicable

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Flammability : Lower explosion limit:  
Remarks: The product is not flammable.  
Explosive properties : Explosion danger:  
Remarks: Not explosive  
Oxidizing properties : Remarks: Non oxidizer  
Vapour pressure : Remarks: not applicable  
Relative density / Density : 2.22  
Bulk density : from 0.5 - 1.2 kg/dm<sup>3</sup>  
Solubility : Water 96 g/l Temperature: 20 °C:  
Partition coefficient (noctanol/water): Remarks: not applicable  
Viscosity : 1.2 mPa.s  
Vapour density : Remarks: not applicable  
9.3. Other data  
Melting point/range : Remarks: not applicable, Decomposition  
Autoinflammability : Remarks: The product is not flammable.  
Decomposition temperature: > 60 °C.

## 10. Stability and reactivity

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10.1. Reactivity  
Stable under normal conditions  
10.2. Chemical stability  
Stable under normal conditions  
10.3. Possibility of hazardous reactions  
None  
10.4. Conditions to avoid  
Stable under normal conditions. Acids.  
10.5. Incompatible materials  
None in particular.  
10.6. Hazardous decomposition products  
None.

## 11. Toxicological information

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11.1 Toxicological data  
Acute oral toxicity  
- LD50, rat, > 4,000 mg/kg  
Acute inhalation toxicity  
- LC50, rat, > 4.74 mg/l  
Acute dermal toxicity  
- LD50, Remarks: no data available  
Skin irritation  
- rabbit, Mild skin irritation  
Eye irritation  
- rabbit, Mild eye irritation  
Sensitization

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- no data available

Chronic toxicity

- no observed effect

Genetic toxicity in vitro

- Genotoxicity in vitro, Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

Teratogenicity

- Oral route (gavage), 10 days, Various species, 330 mg/kg, Did not show teratogenic effects in animal experiments.

Possible hazards (summary)

- Health injuries are not known or expected under normal use.

#### 11.2. Health effects

Inhalation

- Mechanical irritation from the particulates generated by the product.

Eye contact

- Mechanical irritation from the particulates generated by the product.

Skin contact

- Mechanical irritation from the particulates generated by the product.

Ingestion

- Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

## 12. Ecological information

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### 12.1. Ecotoxicity effects

Acute toxicity

- Fishes, *Oncorhynchus mykiss*, LC50, 96 h, 7,700 mg/l
- Fishes, *Oncorhynchus mykiss*, NOEC, 96 h, 2,300 mg/l
- Fishes, *Lepomis macrochirus*, LC50, 96 h, 7,100 mg/l
- Fishes, *Lepomis macrochirus*, NOEC, 96 h, 5,200 mg/l
- Crustaceans, *Daphnia magna*, EC50, 48 h, 4,100 mg/l
- Crustaceans, *Daphnia magna*, NOEC, 48 h, 3,100 mg/l

### 12.2. Mobility

- Water, Soil/sediments

Remarks: Solubility

- Water, Soil/sediments

Remarks: Mobility

### 12.3. Persistence and degradability

Abiotic degradation

- Water, hydrolyses

Result: acid/base equilibrium as a function of pH

Degradation products: carbonic acid/bicarbonate/carbonate

Biodegradation

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

### 12.4. Bioaccumulative potential

- Result: not applicable

### 12.5. Other adverse effects

- no data available

### 12.6. Possible hazards (summary)

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- Ecological injuries are not known or expected under normal use

#### 13. Disposal considerations

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##### 13.1. Waste from residues / unused products

- Contact waste disposal services.
- If recycling is not practicable, dispose of in compliance with local regulations.
- or
- Dilute with plenty of water.
- Neutralise with acid.
- In accordance with local and national regulations.

##### 13.2. Packaging treatment

- To avoid treatments, as far as possible, use dedicated containers.
- or
- Clean container with water.
- Dispose of rinse water in accordance with local and national regulations.
- The empty and clean containers are to be reused in conformity with regulations.
- or
- Must be incinerated in a suitable incineration plant holding a permit delivered by the competent authorities.

#### 14. Transport information

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##### 14.1. UN number

Not classified as dangerous in the meaning of transport regulations.

##### 14.2. UN proper shipping name

N.A.

##### 14.3. Transport hazard class(es)

N.A.

##### 14.4. Packing group

N.A.

##### 14.5. Environmental hazards

N.A.

##### 14.6. Special precautions for user

No data available

Further information: Not classified as dangerous in the meaning of transport regulations

##### 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

N.A.

#### 15. Regulatory information

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

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

##### 15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

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#### 16. Additional information

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##### 16.1 Abbreviations:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

CAS: Chemical Abstracts Service (division of the American Chemical Society).

CLP: Classification, Labeling, Packaging.

DNEL: Derived No Effect Level.

EINECS: European Inventory of Existing Commercial Chemical Substances.

GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).

IMDG: International Maritime Code for Dangerous Goods.

INCI: International Nomenclature of Cosmetic Ingredients.

LTE: Long-term exposure.

PNEC: Predicted No Effect Concentration.

RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.

STE: Short-term exposure.

STEL: Short Term Exposure limit.

STOT: Specific Target Organ Toxicity.

##### Disclaimer:

This material safety data sheet does not constitute a guarantee of the properties of the product and is not a contractual legal report. The information is given in good faith on the basis of our best knowledge of the product at the indicated time. However, we cannot accept responsibility or liability for any consequences arising from its use, no warranty for correctness and completeness is given. We caution the users against the incurred possible risks when the product is used at other ends than the use for which it was initially planned. It is the user's responsibility during handling, storage and product use to consult the main regulatory texts in force regarding workers and environment protection.