

SODA SANAYİİ A.Ş.



SAFETY DATA SHEET According to EU Regulation No Regulation (EC) 453/2010	Sodium Bicarbonate (Food/Feed Grade)	Date : 01.09.2010 Rev. Date :
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1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

1.1. Identification of the substance/preparation

Product name	: Sodium Bicarbonate
Chemical Name	: Sodium hydrogencarbonate
Synonyms	: Sodium bicarbonate
Molecular formula	: NaHCO ₃
Molecular Weight	: 84.02 g/mol

1.2. Use of the Substance/Preparation

Recommended use	: Food and Feed Additive
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1.3. Company/Undertaking Identification

Address	: SODA SANAYİİ A.Ş. Soda Fabrikası 33004 MERSİN/TÜRKİYE
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1.4. Emergency telephone numbers

Telephone Number	: +90 324 241 6600
Fax Number	: +90 324 451 3440
Emergency Tel. No	: +90 324 241 6600
E-mail	: soda@sisecam.com.tr

2. HAZARDS IDENTIFICATION

Appearance : crystalline, powder

Colour : white

Odour : odourless

- Substance non classified according to Directive 67/548/EEC.

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(Food/Feed Grade)****Page: 2/8****Date : 01.09.2010**
Rev. Date :**Revision No : 00****3. COMPOSITION/INFORMATION ON INGREDIENTS****Sodium bicarbonate**CAS-No. : 144-55-8
EINECS-No. : 205-633-8**Norm**

Sodium Bicarbonate, NaHCO ₃ (%)	99.30 min
Sodium Carbonate, Na ₂ CO ₃ (%)	0.50 max
Chloride Ion, Cl ⁻ (ppm)	100 max
Iron, Fe ⁺³ (ppm)	6 max
Sulphate, SO ₄ ⁼ (ppm)	100 max
Insoluble Part (ppm)	200 max
pH (% 1 sol'n.)	8.5 max
Copper, Cu (ppm)	1 max
Arsenic, As (ppm)	1 max
Lead, Pb (ppm)	2 max
Mercury, Hg (ppm)	0.1 max
Loss on Drying (%)	0.25 max
Ammonium Compounds	App. Exp.
Cadmium Cd (ppm)	0.5 max.

4. FIRST AID MEASURES**4.1. Inhalation**

- Remove the subject from dusty environment and let him blow his nose.

4.2. Eye contact

- Rinse thoroughly with plenty of water, also under the eyelids.
- If eye irritation persists, consult a specialist.

4.3. Skin contact

- Wash off with plenty of water.

4.4. Ingestion***The following actions are recommended :***

- If a large amount is swallowed, get medical attention.

If victim is conscious:

- If swallowed, rinse mouth with water (only if the person is conscious).

If victim is unconscious but breathing:

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- not applicable

5. FIRE-FIGHTING MEASURES

5.1. Suitable extinguishing media

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

5.2. Extinguishing media which must not be used for safety reasons

- None.

5.3. Special exposure hazards in a fire

- Not combustible.

5.4. Special protective equipment for fire-fighters

- No special precautions required.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions

- Refer to protective measures listed in sections 7 and 8.

6.2. Environmental precautions

- Do not flush into surface water or sanitary sewer system.
- Prevent any mixture with an acid into the sewer/drain (gas formations).

6.3. Methods for cleaning up

- Sweep up and shovel into suitable containers for disposal.
- Avoid dust formation.
- Keep in properly labelled containers.
- Keep in suitable, closed containers for disposal.
- Treat recovered material as described in the section "Disposal considerations".

7. HANDLING AND STORAGE

7.1. Handling

- Keep away from Incompatible products.

7.2. Storage

- Keep in a dry place.
- Store in original container.
- Keep container closed.
- Keep away from Incompatible products.

7.3. Specific use(s)

- For further information, please contact: Supplier

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7.4. Packaging material

- Exterior Woven PP+interior laminated
- Kraft

7.5. Other information

- Avoid dust formation.
- Refer to protective measures listed in sections 7 and 8.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION**8.1. Exposure Limit Values****Sodium bicarbonate**

Time Weighted Average for 8 hour workdays; TWA = 10 mg/m³

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

Appearance	: crystalline, powder
Colour	: white
Odour	: odourless

9.2. Important health safety and environmental information

pH	: 8.5 <i>Concentration: 52 g/l</i>
Boiling point/range	: <i>Remarks: not applicable, Thermal decomposition</i>

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Flash point	: <i>Remarks:</i> not applicable
Flammability	: <i>Lower explosion limit:</i> : <i>Remarks:</i> The product is not flammable.
Explosive properties	: <i>Explosion danger:</i> <i>Remarks:</i> Not explosive
Oxidizing properties	: <i>Remarks:</i> Non oxidizer
Vapour pressure	: <i>Remarks:</i> not applicable
Relative density / Density	: 2.22
Bulk density	: from 0.5 - 1.2 kg/dm ³
Solubility	: Water 96 g/l @ <i>Temperature:</i> 20 °C : Other: slightly soluble in Alcohol
Partition coefficient (noctanol/ water)	
	: <i>Remarks:</i> not applicable
Viscosity	: 1.2 mPa.s
Vapour density	: <i>Remarks:</i> not applicable

9.3. Other data

Melting point/range	: <i>Remarks:</i> not applicable, Decomposition
Autoinflammability	: <i>Remarks:</i> The product is not flammable.
Decomposition temperature	: > 60 °C

10. STABILITY AND REACTIVITY

10.1. Stability

- Stable under recommended storage conditions.

10.2. Conditions to avoid

- none

10.3. Materials to avoid

- Acids

10.4. Hazardous decomposition products

- none

11. TOXICOLOGICAL INFORMATION

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

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Sensitization

- 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**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.

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12.4. Bioaccumulative potential

- Result: not applicable

12.5. Results of PBT assesstment

- Sodium bicarbonate is not considered to be a PBT substance.

12.6. Other adverse effects

- no data available

13. DISPOSAL CONSIDERATIONS**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

- | | |
|--------------------------------|-----------------|
| - Sea (IMO/IMDG) | - not regulated |
| - Air (ICAO/IATA) | - not regulated |
| - European Road/Rail (ADR/RID) | - not regulated |

15. REGULATORY INFORMATION**15.1. EC Label**

- Sodium bicarbonate is currently not listed in ANNEX VI of EU CLP Regulation Np 1272/2008. Based on available physical, health and environmental data there is no need to classify or label according to the criteria of the CLP regulation.

15.2. Inventory Information

EU list of existing chemical substances (EINECS) : - In compliance with inventory.

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15.3. Other regulations

- European Waste Catalogue, Decision (2000/532/EC), Waste codes should be assigned by the user based on the application for which the product was used.

16. OTHER INFORMATION**16.1. Administrative information**

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