

Product Name	Sodium bicarbonate
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SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product Identification:

Product Name: Sodium bicarbonate

Synonyms: Sodium hydrogen carbonate; Sodium acid carbonate; Carbonic acid, monosodium salt

CAS-No: 144-55-8

EC-No.: 205-633-8

Molecular Formula: NaHCO₃

REACH Registration No: A registration number is not available for this substance as the substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) No 1907/2006, the annual tonnage does not require a registration, or the registration is envisaged for a later registration deadline.

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

Identified Uses: Laboratory analysis, manufacture of substances , Used as an excipient and a biopharma ingredient

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

- Company** **Finar Limited**
184-186/P, Chacharwadi Vasna,
Sarkhej-Bavla Highway,
Ta: Sanand, Dist.: Ahmedabad-382110, Gujarat, India.
Email: info@finarchemicals.com
Web: www.finarchemicals.com
- E-mail Address** safety.finar@actylis.com; info.finar@actylis.com

1.4. Emergency Telephone Number:

- For Emergency Contact No: +91 - 2717 - 616 717

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SECTION 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:

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

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.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances: Sodium bicarbonate

3.2 Mixtures:

Component	CAS-No	EC-No.	Weight %
Sodium bicarbonate	144-55-8	205-633-8	>95%

SECTION 4: FIRST AID MEASURES

4.1 Description of First Aid Measures:

General information:-

Consult a physician. Show this safety data sheet to the doctor in attendance.

Eye Contact:-

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Get medical attention.

Skin Contact:-

Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately if symptoms occur.

Inhalation:-

Move to fresh air. Get medical attention immediately if symptoms occur.

Ingestion:-

Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.

4.2 Most important symptoms and effects, both acute and delayed:-

irritant effects, Nausea, Vomiting

4.3 Indication of any immediate medical attention and special treatment needed:-

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No Data Available

SECTION 5: FIRE FIGHTING MEASURES

5.1 Extinguishing media:-

Suitable extinguishing media- Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture:-

Carbon oxides, Sodium oxides

5.3 Special Protective Equipment for firefighters:-

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further Information:-

No Data Available

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:-

Avoid dust formation. Avoid breathing vapours, mist or gas.

For personal protection see section 8.

6.2 Environmental precautions:-

No special environmental precautions required.

6.3 Methods and material for containment and cleaning up:-

Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections:

For disposal see section 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for Safe Handling:-

Wear personal protective equipment. Ensure adequate ventilation. Avoid ingestion and inhalation.

Avoid contact with skin, eyes and clothing. Avoid dust formation.

7.2 Conditions for safe storage, including any incompatibilities:-

Keep containers tightly closed in a dry, cool and well-ventilated place.

7.3 Specific end use(s):

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

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters:-

Components with workplace control parameters

8.2 Exposure Controls:-

Appropriate Engineering Controls:-

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. See section 7.1.

Personal Protective Equipment:-

Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the respective supplier.

- **Eye/face protection:-**

Safety Goggles

- **Hand protection:-** Wear appropriate protective gloves

- **Respiratory Protection:-**

Required when dusts are generated.

Recommended Filter type: Filter P 1 (acc. to DIN 3181) for solid particles of inert substances

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

- **Control of Environmental Exposure:-**

Do not let product enter drains.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

- **Appearance:** White
- **Physical State:** Solid
- **Odor:** Odorless
- **Odor Threshold:** No data available
- **pH:** 8.3 0.1M aq. solution
- **Melting Point:** 270 °C
- **Ignition Temperature:** No data available
- **Decomposition Temperature:** > 50°C
- **Vapor Pressure:** No data available

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- **Relative Vapor Density:** No data available
- **Density:** 2.22 g/cm³ at 20 °C
- **Volatility:** No data available
- **Bulk Density:** ca.1,000 kg/m³
- **Odor Threshold:** No data available
- **Viscosity, dynamic:** No data available
- **Water/Oil Dist. Co eff.:** No data available
- **Ionicity (in Water):** No data available
- **Partition Co-efficient: n-octanol/water:** No data available
- **Boiling Point/Range:** No data available
- **Flash Point:** No data available
- **Sublimation Point:** No data available
- **Specific Gravity:** No data available
- **Water Solubility:** 96 g/l at 20°C

9.2. Other information:

Molecular Formula: - NaHCO₃

Molecular Weight: - 84.01 g/mol

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity:-

No Data Available

10.2 Chemical Stability:-

Stable under recommended storage conditions

10.3 Possibility of Hazardous Reactions:-

No Data Available

10.4 Conditions to Avoid:-

No Data Available

10.5 Incompatible Materials:-

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Strong acids, Strong oxidizing agents

10.6 Hazardous Decomposition Products:-

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Sodium oxides

Other decomposition products - No data available

In the event of fire: see section 5

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

Acute toxicity:-

LD50 Oral - Rat - 4.220 mg/kg

Skin corrosion/irritation:-

Skin - Human

Result: Mild skin irritation - 3 d

Serious eye damage/eye irritation:-

Eyes - Rabbit

Result: Mild eye irritation - 30 s

Respiratory or skin sensitization:-

No Data Available

Germ cell mutagenicity:-

No Data Available

Carcinogenicity

IARC: No components of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity:-

No Data Available

Specific target organ toxicity - single exposure:-

No Data Available

Specific target organ toxicity - repeated exposure:-

No Data Available

Aspiration hazard:-

No Data Available

Additional Information:-

RTECS: VZ0950000

Exposure to large amounts can cause: Gastrointestinal disturbance, Heavy or prolonged skin exposure may result in the absorption of harmful amounts of material.

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To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity:

Toxicity to fish: -

LC50 *Gambusia affinis* (Mosquito fish): 7,550 mg/l; 96 h
(IUCLID)

Toxicity to daphnia and other aquatic invertebrates: -

EC50 *Daphnia magna* (Water flea): 2,350 mg/l; 48 h
(IUCLID)

12.2 Persistence and degradability Persistence: -

Biodegradability

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

12.3 Bio accumulative Potential: -

No Data Available

12.4 Mobility in soil: -

No Data Available

12.5 Results of PBT and vPvB Assessment:-

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other Adverse Effects:-

Discharge into the environment must be avoided.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste Disposal Methods:

Waste treatment methods

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

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SECTION 14: TRANSPORT INFORMATION

	Land Transport (ADR/RID)	Air Transport (IATA)	Sea Transport (IMDG)
14.1 UN number	Not classified as dangerous in the meaning of transport regulations.	Not classified as dangerous in the meaning of transport regulations.	Not classified as dangerous in the meaning of transport regulations.
14.2 Proper shipping name			
14.3 Class			
14.4 Packing group			
14.5 Environmentally hazardous			
14.6 Special precautions for user			
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not Relevant			

SECTION 15: REGULATORY INFORMATION**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:**

National legislation

Storage class 10-13

15.2 Chemical safety assessment:

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

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SECTION 16: OTHER INFORMATION

Training

Provide adequate information, instruction and training for operators.

References: Not available

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