

Sodium Bicarbonate

MSDS Number: 11020

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1. Company and Product Identification

Clabber Girl Corporation

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Sodium Bicarbonate

2. Information on Ingredients

Sodium Bicarbonate

CAS Number: 144-55-8

Chemical Name: Sodium Bicarbonate

Synonyms: Baking Soda

3. Hazards Identification (Per Ingredient)

Sodium Bicarbonate:

HMIS Rating: Health 0; Fire 0; Reactivity 0

Emergency Overview:

Appearance and Odor: White crystalline powder with no odor.

Not a fire hazard.

Warning Statements:

No significant health or environmental effects associated with this material.

Potential Health Effects:

- *Eye Contact:* Not an eye irritant.
- *Skin Contact:* Not a skin irritant.

- **Inhalation:** None known.
- **Ingestion:** Material is practically non-toxic. Small amounts (1-2 tablespoonfuls) swallowed during normal handling operations are not likely to cause injury as long as the stomach is not overly full: swallowing larger amounts may cause injury
- **Subchronic effects/Carcinogenicity:** Based on published studies on its effects in animals and humans, sodium bicarbonate is not teratogenic or genotoxic. Only known subchronic affect is that of a marked systemic alkalosis. Not classified as carcinogenic by NTP, IARC, OSHA, ACGIH or NIOSH.

4. First Aid Measures

Sodium Bicarbonate:

EYES: Check for and remove contacts. Flood eyes with clean flowing water, low pressure and luke warm (not hot) if possible, occasionally lifting eyelids.

INGESTION: If large amounts of this material are swallowed, do not induce vomiting. Administer water if person is conscious. Never give anything by mouth to an unconscious person.

NOTE TO PHYSICIAN: Large doses may produce systemic alkalosis and expansion in extracellular fluid volume with edema.

5. Fire-Fighting Measures

Sodium Bicarbonate:

Flashpoint:	Not combustible
Method Used:	Not applicable
Extinguishing Media:	Not-combustible material. Use extinguishing media appropriate for surrounding fire
Fire-Fighting Instructions:	Carbon Dioxide may be generated making necessary the use of a self-contained breathing apparatus (SCBA) and full protective equipment (Bunker Gear). Carbon dioxide is an asphyxiant at levels over 5% w/w. Sodium oxide, another thermal decomposition product existing at temperatures above 1564F is a respiratory,

eye, and skin irritant. Avoid inhalation, eye and skin contact with sodium oxide dusts.

Unusual Fire and Explosion Hazards: None known

6. Accidental Release Measures

Sodium Bicarbonate:

Scoop up into dry, clean containers. Wash away uncontaminated residue with water.

7. Handling and Storage

Sodium Bicarbonate:

Store in cool, dry area and away from incompatible substances.

Sodium Bicarbonate reacts with acids to yield carbon dioxide gas which can accumulate in confined spaces. Do not enter confined spaces until they have been well ventilated and carbon dioxide and oxygen levels have been determined to be safe.

8. Exposure Control/Personal Protection

Sodium Bicarbonate:

Respiratory Protection: Dust mask required if total dust level exceeds 10 mg/m³.

Protection Gloves: General purpose for handling dry products. Impervious gloves when working with solutions.

Eye Protection: Safety glasses when handling bulk material or when dusts are generated.

Other Protective Clothing or Equipment: Full cover clothing. Apron where splashing may occur when working with solutions.

9. Physical and Chemical Properties

Sodium Bicarbonate:

Appearance:	white crystalline powder
Odor:	None
Physical state:	Solid
pH as is:	Not applicable

pH (1% SOLN. w/v):	8.2
Vapor Pressure:	Not applicable
Vapor Density:	Not applicable
Boiling Point:	Not applicable
Freezing/Melting Point:	Not applicable
Solubility in Water:	8.6g/100ml @20 degrees C
Bulk Density (g/cc):	62 lb/Ft3
% Volatile:	Not applicable
Volatile Organic Compounds:	Not applicable
Molecular weight:	84.02

10. Stability and Reactivity

Sodium Bicarbonate:

Chemical Stability: Stable

Conditions to Avoid: Temperature above 65 degrees C (150 degrees F).

Incompatibility with Other Materials: Reacts with acids to yield carbon dioxide. Also may yield free caustic in presence of lime dust (CaO) and moisture (i.e., water, perspiration).

Hazardous Decomposition Products: Heating above 100 degrees C may cause dangerous levels of carbon dioxide gas to be present in confined spaces. Yields sodium oxide if exposed to temperatures above 850 degrees C. Avoid inhalation, eye and skin contact with sodium oxide.

11. Toxicological Information

Sodium Bicarbonate:

Eye Effects: The material was minimally irritating to unwashed eyes and practically non-irritating to washed eyes (rabbits)

Skin Effects: Not a skin irritant or dermally toxic. Not a contact sensitizer.

Acute oral effects: Acute Oral-rat LD50 = 7.3 g/kg.

Acute inhalation: LC 50 (rat) > 4.74 mg/l

12. Ecological Information

Sodium Bicarbonate:

Aquatic Toxicity:

Daphnides: EC50=4100mg/l.

Bluegill: LC50=7100mg/l.

Rainbow Trout: LC50=7700 mg/l

Persistence: This product is not expected to persist in the environment.

Bioaccumulation: This product is not expected to bioaccumulate.

13. Disposal Considerations

Sodium Bicarbonate:

Bury in a secured landfill in accordance with all local, state, and federal environmental regulations. Empty containers may be incinerated or disregarded as general trash.

14. Transportation Information:

Sodium Bicarbonate:

D.O.T. Shipping Name: Not regulated

Technical Shipping Name: Sodium Bicarbonate

D.O.T. Hazard Class: None

U.N./N.A. Number: None

Hazardous Substance/RQ: None

D.O.T. Label: None

15. Regulatory Information

Sodium Bicarbonate:

Clean Air Act Section 611: Material neither contains nor is it manufactured with ozone depleting substances (ODS).

Federal Water Pollution Control Act (40 CFR 401.15): Material contains no intentionally added or detectable (contaminant) levels of EPA priority toxic pollutants.

Food and Drug Administration: Generally Recognized as Safe (GRAS) direct food additive (21 CFR 184.1736).

US Department of Agriculture: List of Proprietary Substances – Permitted Use Codes 3A, J1, A1, G1, and L1

CERCLA Reportable Quantity: None

OSHA: Not hazardous under 29 CFR 1910.1200

RCRA: Not a hazardous material or a hazardous waste by listing or characteristic
SARA Title III:

Section 302, Extremely Hazardous Substances: None

Section 311/312, Hazardous Categories: Non-hazardous

Section 313, Toxic Chemicals: None

Sodium bicarbonate is reported in the EPA TSCA Inventory List

Contains no VOCs.

National Stocking Number: 6810002646618. Contract No. DLA 40086C1831

NSF Standard 60: Corrosion and Scale Control in Potable Water. Max use 200 mg/1.

Canada-DSL

European Inventory (EINECS)): 205-633-8

Japanese Inventory (MITI): 1-164

Australian Inventory (AICS): Carbonic acid, monosodium salt.

16. Other Information

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