

Issue Date: 01/10/14

Reviewed Date: 01/03/19

1. Company and Product Identification

1.1 Product Identifier

Baking Soda (Sodium Bicarbonate)

1.2 Details of the Supplier of the Safety Data Sheet (SDS)

Clabber Girl Corporation

900 Wabash Ave.

Terre Haute, IN 47808

1-812-232-9446 (USA)

1.3 Emergency Telephone Number

Chemtrec: 1-800-424-9300 or 1-703-527-3887 (collect calls accepted)

1.4 Recommended Use

To be used as a food additive, Leavening Agent, Processing Aid

2. Hazards Identification (Per Ingredient)

The consumer variant of this product is labeled in accordance with regulations and administered by the Consumer Product Safety Commission (CPSC) and the Food and Drug Administration (FDA). The use pattern and exposure in the workplace are generally not consistent with those experienced by consumers. The requirements of the Occupational Safety and Health Administration applicable to this SDS differ from the labeling requirements of the CPSC and FDA, and as a result, this SDS may contain additional health hazard information not pertinent to consumer use and not found on the product label.

Classification of the Substance Mixture:

Classification: Not classified

Label Elements:

GHS-US Labeling: No labeling applicable

Other Hazards:

Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions. Prolonged contact with dust can produce mechanical irritation.

Unknown Acute Toxicity: Not available

3. Information on Ingredients

CAS Number: 144-55-8
Chemical Name: Sodium Bicarbonate
Synonyms: Baking Soda; Bicarbonate of Soda, Bicar

4. First Aid Measures

EYES: Rinse with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if irritation persists.

INGESTION: Rinse mouth. Do not induce vomiting. Seek medical attention if a large amount is swallowed.

INHALATION: When symptoms occur: go into open air and ventilate suspected area.

SKIN: Brush off loose particles from skin. Rinse immediately with plenty of water. Obtain medical attention if irritation develops/persists.

5. Fire-Fighting Measures

Extinguishing Media: Use extinguishing media appropriate for surrounding fire.

Unsuitable Extinguishing Media: For surrounding fire: Use of heavy stream of water may spread fire.

Special Hazards from Substance or Mixture:

Fire Hazard: Not Flammable. Under fire conditions, hazardous fumes will be present.

Explosion Hazard: Product is not explosive.

Reactivity:	Hazardous reactions will not occur under normal conditions.
Fire-Fighting Instructions:	
Precautionary Measures:	Wear self-contained breathing apparatus when entering area unless atmosphere is proved to be safe.
Firefighting Instructions:	Exercise caution when fighting any chemical fire.
Firefighting Protection:	Do not enter fire area without proper protective equipment, including respiratory protection.
Hazardous Combustion Products:	Not combustible

6. Accidental Release Measures

Personal Precautions:	Handle in accordance with good industrial hygiene and safety practice. Do not breathe dust or fumes. Avoid skin and eye contact.
For Non-Emergency Personnel:	
Protective Equipment:	Use appropriate personal protection equipment.
Emergency Procedures:	Evacuate unnecessary personnel.
For Emergency Personnel:	
Protective Equipment:	Equip cleanup crew with proper protection.
Emergency Procedures:	Ventilate area.
Environmental Precautions:	Prevent entry to sewers and public waters. Avoid release to the environment.
Methods and Material for Contaminant and Cleaning Up:	
For Containment:	Contain and collect as any solid.
Methods for Clean Up:	Clean up spills immediately and dispose of waste safely. Avoid generation of dust during clean-up of spills. Keep in suitable, closed containers for disposal. Contact competent authorities after a spill.

7. Handling and Storage

Storage:	Store in cool, dry area and away from incompatible substances.
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Hazards when Processed:	When heated, material emits irritating fumes.
Hygiene Measures:	Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work.
Storage Conditions:	Store in a dry, cool and well-ventilated place. Keep container closed when not in use.
Incompatible Materials:	Acids
Storage Temperature:	<50°C (122°F)

8. Exposure Control/Personal Protection

Engineering Controls:	For occupational/workplace settings: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.
Personal Protective Equipment:	For occupational or bulk quantities: Gloves, safety glasses. Dust formation: Dust mask.
Materials for Protective Clothing:	For occupational or bulk quantities: Chemically resistant materials and fabrics.
Respiratory Protection:	Use a NIOSH-approved respirator or self-contained breathing apparatus whenever exposure may exceed established Occupation Exposure Limits.
Hand Protection:	For occupational or bulk quantities: Wear chemically resistant gloves.
Eye Protection:	For occupational or bulk quantities: Chemical goggles or safety glasses.
Other Protective Clothing:	Full cover clothing. Apron where splashing may occur when working with solutions.
Other Information:	When using, do not eat, drink or smoke.

Control Parameters:

Particulate not otherwise classified (PNOC)		
USA ACGIH	ACGIH TWA (mg/m ³)	3 mg/m ³ Respirable fraction 10 mg/m ³ Total Dust
USA OSHA	OSHA PEL (TWA) (mg/m ³)	5 mg/m ³ Respirable fraction 15 mg/m ³ Total Dust
Alberta	OEL TWA (mg/m ³)	10 mg/m ³ (total)
British Columbia		10 mg/m ³ (total dust)
Manitoba		10 mg/m ³ (inhalable particles, recommended)
New Brunswick		3 mg/m ³ (particulate matter containing no Asbestos and <1% Crystalline silica, respirable fraction)
Newfoundland & Labrador		10 mg/m ³ (inhalable particles, recommended)
Nova Scotia		10 mg/m ³ (inhalable particles, recommended)
Nunavut		5 mg/m ³ (respirable mass)
Northwest Territories		5 mg/m ³ (respirable mass)
Ontario		10 mg/m ³ (inhalable)
Prince Edward Island		10 mg/m ³ (inhalable particles, recommended)
Québec		VEMP (mg/m ³)
Saskatchewan	OEL STEL (mg/m ³)	20 mg/m ³ (insoluble or poorly soluble-inhalable fraction) 6 mg/m ³ (insoluble or poorly soluble-respirable fraction)
Saskatchewan	OEL TWA (mg/m ³)	10 mg/m ³ (insoluble or poorly soluble-inhalable fraction) 3 mg/m ³ (insoluble or poorly soluble-respirable fraction)

9. Physical and Chemical Properties

	Sodium Bicarbonate
Appearance:	White Crystalline Powder
Odor:	None
Odor Threshold:	NA
Physical state:	Solid
pH:	8.4 g/l @ 77°F
Molecular Weight	84.01 g/mol
Vapor Pressure:	Thermal Decomposition
Vapor Density:	Not Available
Boiling Point:	Not Available
Flash Point:	Inorganic
Auto-Ignition Temperature	Not Available
Flammability:	Not Flammable
Upper/Lower flammability/explosive Limits:	Not Expected
Freezing/Melting Point:	Not Available
Evaporations Rate:	Not Available
Decomposition Temperature:	>122°F (50°C)

Viscosity:	Not Available
Solubility in Water:	Inorganic
Partition coefficient: n-octanol / water:	Not Available
Bulk Density (kg/dm ³):	0.5 – 1.3
Relative Density:	2.21 - 2.23 @ 68°F (20°C)
% Volatile:	Not Applicable

10. Stability and Reactivity

Reactivity:	Incompatible with acids. Decomposes slowly on exposure to water.
Chemical Stability:	Stable under recommended storage conditions.
Conditions to Avoid:	Temperature above 50°C (122°F). Exposure to moisture or moist air.
Incompatibilities:	Acids
Hazardous Decomposition Products:	None known.
Hazardous Reactions:	Hazardous polymerization will not occur.

11. Toxicological Information

Acute oral effects:	Oral-rat LD50 = 7.3 g/kg.
Acute inhalation:	LC50 Inhalation (rat) > 4.74 mg/l/4h

<u>GHS Properties</u>	<u>Classification</u>
Acute Toxicity	Not Classified
Aspiration Hazard	Not Classified
Carcinogenicity	Not Classified
Genotoxicity in vivo	No Data Available
Skin Corrosion / Irritation	Slight Irritation
Skin Sensitization	Not Classified
STOT-RE	Not Classified
STOT-SE	Oral, Inhalation
Toxicity for Reproduction	Not Classified
Respiratory Sensitization	Not Classified
Serious Eye Damage / Irritation	Slight Irritation

Genotoxicity in vitro:	Strain: Escherichia coli with and without metabolic activation
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Negative**Method:** according to a standardized method**Published data****Ames test****With metabolic activation****Negative****Method:** Mutagenicity (Salmonella typhimurium – reverse mutation assay)**Published data**

Eye Contact:	May cause irritation due to mechanical abrasion.
Skin Contact:	Contact with large amounts of dust may cause mechanical irritation.
Inhalation:	Prolonged inhalation of dust may cause respiratory irritation.
Ingestion:	Large doses may produce systemic alkalosis and expansion in extracellular fluid volume with edema.
Chronic Effects:	None expected under normal conditions of use.

12. Ecological Information

Toxicity:	No additional information available
LC50 Fish 1:	7100 mg/l Bluegill
EC50 Daphnia 1:	4100 mg/l
LC50 Fish 2:	7700 mg/l Rainbow Trout
LC50 Fish 1:	8250-9000 mg/l (Exposure time: 96h – Species Lepomis macrochirus [static])
EC50 Daphnia 1:	2350 mg/l (Exposure time 48h – Species: Daphnia magna)
Persistence and Degradability:	Product dissociates rapidly to corresponding ions on contact with water.

Bioaccumulation:	Not Applicable, Inorganic
Mobility in Soil:	Not Available
Other Adverse Effects:	Avoid release to the environment

13. Disposal Considerations

Product Disposal:	Contact waste disposal services
	Dilute with plenty of water
	Neutralize with acid
	In accordance with local and national regulations

14. Transportation Information:

DOT:	Not regulated for transport
IMDG:	Not regulated for transport
IATA:	Not regulated for transport
TDG:	Not regulated for transport

15. Regulatory Information

US Federal and International Regulations:

Inventory						
Component	CAS	Australia AICS	Canada DSL	China IECSC	EEC EINECS	Japan ENCS
Sodium Bicarbonate	144-55-8	Yes	Yes	Yes	Yes	Yes

Inventory					
Component	CAS	Korea ECL	New Zealand NZIoC	Philippines PICCS	United States TSCA
Sodium Bicarbonate	144-55-8	Yes	Yes	Yes	Yes

US State Regulations: Neither this product nor its chemical components appear on any US state lists.

Canadian Regulations:

Sodium Bicarbonate (144-55-8)	
Listed on the Canadian DSL (Domestic Substance List)	
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

16. Other Information

Reviewed January 3, 2019 – Clabber Girl Research and Development

Revision – March 19, 2015 – Clabber Girl Research and Development – Updated format to match new SDS standards. Updated with new information from supplier’s SDS.

Format Revision June 1, 2009 – Clabber Girl Research and Development

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