

# Safety Data Sheet

## Sodium Bicarbonate (Baking Soda)



### Section 1 Product Description

**Product Name:** Baking Soda  
**Recommended Use:** Science education applications  
**Synonyms:** Baking soda, Sodium Acid Carbonate, Carbonic Acid, Sodium Salt  
**Supplier:** C2A Sales & Supplies (Barbados) Ltd.  
#3 Canewood Road, Jackson, St. Michael, Barbados  
Tel: (246) 426-1256

### Section 2 Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

GHS Classification:

**Other Safety Precautions:** Not a dangerous substance according to GHS classification criteria.

### Section 3 Composition / Information on Ingredients

<u>Chemical Name</u>	<u>CAS #</u>	<u>%</u>
Sodium Bicarbonate	144-55-8	100

### Section 4 First Aid Measures

#### Emergency and First Aid Procedures

**Inhalation:** In case of accident by inhalation: remove casualty to fresh air and keep at rest.  
**Eyes:** In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
**Skin Contact:** After contact with skin, wash immediately with plenty of water.  
**Ingestion:** If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

### Section 5 Firefighting Procedures

**Extinguishing Media:** Use media suitable to extinguish surrounding fire.  
**Fire Fighting Methods and Protection:** Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.  
**Fire and/or Explosion Hazards:** Fire or excessive heat may produce hazardous decomposition products.  
**Hazardous Combustion Products:** Carbon dioxide, Carbon monoxide

### Section 6 Spill or Leak Procedures

**Steps to Take in Case Material Is Released or Spilled:** No health affects expected from the clean-up of this material if contact can be avoided. Follow personal protective equipment recommendations found in Section 8 of this (M)SDS  
**Methods for Clean-up:** Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation.

### Section 7 Handling and Storage

**Handling:** Avoid creating and inhaling dust.  
**Storage:** Keep container tightly closed in a cool, well-ventilated place.  
**Storage Code:** Green - general chemical storage

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## Section 8

## Protection Information

<u>Chemical Name</u>	<u>ACGIH</u>	<u>OSHA PEL</u>		
	<u>(TWA)</u>	<u>(STEL)</u>	<u>(TWA)</u>	<u>(STEL)</u>
Sodium Bicarbonate	N/A	N/A	N/A	N/A

### Control Parameters

#### Engineering Measures:

No exposure limits exist for the constituents of this product. General room ventilation might be required to maintain operator comfort under normal conditions of use.

#### Personal Protective Equipment (PPE):

Lab coat, apron, eye wash, safety shower.

#### Respiratory Protection:

No respiratory protection required under normal conditions of use.

#### Eye Protection:

Wear chemical splash goggles when handling this product. Have an eye wash station available.

#### Skin Protection:

Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.

#### Gloves:

No information available

## Section 9

## Physical Data

**Formula:** NaHCO<sub>3</sub>

**Molecular Weight:** 84.00

**Appearance:** White Powder

**Odor:** None

**Odor Threshold:** No data available

**pH:** No data available

**Melting Point:** No data available

**Boiling Point:** No data available

**Flash Point:** No data available

**Flammable Limits in Air:** No data available

**Vapor Pressure:** No data available

**Evaporation Rate (BuAc=1):** No data available

**Vapor Density (Air=1):** No data available

**Specific Gravity:** 2.159

**Solubility in Water:** Soluble

**Log Pow (calculated):** No data available

**Autoignition Temperature:** No data available

**Decomposition Temperature:** 50 C

**Viscosity:** No data available

**Percent Volatile by Volume:** No data available

## Section 10

## Reactivity Data

#### Reactivity:

Not generally reactive under normal conditions.

#### Chemical Stability:

Stable under normal conditions.

#### Conditions to Avoid:

None known.

#### Incompatible Materials:

Acids

#### Hazardous Decomposition Products:

Carbon oxides

#### Hazardous Polymerization:

Will not occur

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## Section 11 Toxicity Data

**Routes of Entry:** Ingestion.  
**Symptoms (Acute):** Alkalosis, Diarrhea, Hypertension  
**Delayed Effects:** No data available

### Acute Toxicity:

Chemical Name	CAS Number	Oral LD50	Dermal LD50	Inhalation LC50
Sodium Bicarbonate	144-55-8	Oral LD50 Mouse 3360 mg/kg Oral LD50 Rat 4220 mg/kg	Not determined	Not determined

### Carcinogenicity:

Chemical Name	CAS Number	IARC	NTP	OSHA
Sodium Bicarbonate	144-55-8	Not listed	Not listed	Not listed

### Chronic Effects:

**Mutagenicity:** No evidence of a mutagenic effect.  
**Teratogenicity:** No evidence of a teratogenic effect (birth defect).  
**Sensitization:** No evidence of a sensitization effect.  
**Reproductive:** No evidence of negative reproductive effects.  
**Target Organ Effects:**

<b>Acute:</b>	No data available
<b>Chronic:</b>	No data available

## Section 12 Ecological Data

**Overview:** This material is not expected to be harmful to the ecology.  
**Mobility:** This material is expected to have high mobility in soil. It absorbs weakly to most soil types.  
**Persistence:** No data  
**Bioaccumulation:** No data  
**Degradability:** No data  
**Other Adverse Effects:** No data

Chemical Name	CAS Number	Eco Toxicity
Sodium Bicarbonate	144-55-8	96 HR LC50 LEPOMIS MACROCHIRUS 8250 - 9000 MG/L [STATIC] 48 HR EC50 DAPHNIA MAGNA 2350 MG/L 120 HR EC50 NITZSCHIA LINEARIS 650 MG/L

## Section 13 Disposal Information

**Disposal Methods:** Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.  
**Waste Disposal Code(s):** Not Determined

## Section 14 Transport Information

**Ground - DOT Proper Shipping Name:** Not regulated for transport by US DOT.  
**Air - IATA Proper Shipping Name:** Not regulated for air transport by IATA.

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## Section 15

## Regulatory Information

**TSCA Status:** All components in this product are on the TSCA Inventory.

Chemical Name	CAS Number	§ 313 Name	§ 304 RQ	CERCLA RQ	§ 302 TPQ	CAA 112(2) TQ
Sodium Bicarbonate	144-55-8	No	No	No	No	No

**California Prop 65:** No California Proposition 65 ingredients

## Section 16

## Additional Information

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### Glossary

ACGIH	American Conference of Governmental Industrial Hygienists	NTP	National Toxicology Program
CAS	Chemical Abstract Service Number	OSHA	Occupational Safety and Health Administration
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	PEL	Permissible Exposure Limit
DOT	U.S. Department of Transportation	ppm	Parts per million
IARC	International Agency for Research on Cancer	RCRA	Resource Conservation and Recovery Act
N/A	Not Available	SARA	Superfund Amendments and Reauthorization Act
		TLV	Threshold Limit Value
		TSCA	Toxic Substances Control Act
		IDLH	Immediately dangerous to life and health