

# SAFETY DATA SHEET

Sodium Bicarbonate

SDS #: 144-55-8  
Revision date: 2015-04-07  
Format: NA  
Version 3.02

# TRONOX

## 1. PRODUCT AND COMPANY IDENTIFICATION

### Product Identifier

Product Name Sodium Bicarbonate

### Other means of identification

Product Code(s) 144-55-8

Synonyms Baking Soda, Bicarbonate of Soda

### Recommended use of the chemical and restrictions on use

Recommended Use: Leavening agent, cleaner ingredient, bath salt ingredient, water softener, diaper rinse ingredient, feed additive

Restrictions on Use: No information available

### Manufacturer Address

Tronox Specialty Alkali Corporation  
1735 Market Street  
Philadelphia, PA 19103  
Tel: +1 877-362-2248 or +1 215-299-6904  
www.tronox.com

### Emergency telephone number

1 307 / 872 2452 (Plant - Green River, WY)  
(303) 595-9048 (Medical - U.S. - Call Collect)

For leak, fire, spill, or accident emergencies, call:  
1 800 / 424-9300 (CHEMTREC - U.S.A. & Canada)  
1 703 / 527 3887 (CHEMTREC - All Other Countries - Collect)

## 2. HAZARDS IDENTIFICATION

### Classification

#### OSHA Regulatory Status

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

### GHS Label elements, including precautionary statements

#### EMERGENCY OVERVIEW

The product contains no substances which at their given concentration, are considered to be hazardous to health

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## Hazards not otherwise classified (HNOC)

No hazards not otherwise classified were identified.

## Other Information

Product dust may cause mechanical eye irritation.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula NaHCO<sub>3</sub>

Chemical name	CAS-No	Weight %
Sodium Bicarbonate	144-55-8	100

Synonyms are provided in Section 1.

### 4. FIRST AID MEASURES

<b>Eye Contact</b>	Flush eyes with water as a precaution. Get medical attention if irritation develops and persists.
<b>Skin Contact</b>	Wash skin with soap and water. Get medical attention if irritation develops and persists.
<b>Inhalation</b>	Remove person to fresh air. If signs/symptoms continue, get medical attention.
<b>Ingestion</b>	Never give anything by mouth to an unconscious person. Get medical attention if symptoms occur.
<b>Most important symptoms and effects, both acute and delayed</b>	None known.
<b>Indication of immediate medical attention and special treatment needed, if necessary</b>	Treat symptomatically.

### 5. FIRE-FIGHTING MEASURES

<b>Suitable Extinguishing Media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
<b>Specific Hazards Arising from the Chemical</b>	None in particular. Not flammable.
<b>Hazardous Combustion Products</b>	None.
<b><u>Explosion data</u></b>	
<b>Sensitivity to Mechanical Impact</b>	Not sensitive.
<b>Sensitivity to Static Discharge</b>	Not sensitive.
<b>Protective equipment and precautions for firefighters</b>	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

### 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions</b>	Avoid dust formation.
<b>Other</b>	For further clean-up instructions, call Emergency Hotline number listed in Section 1 "Product and Company Identification" above.

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<b>Environmental Precautions</b>	Prevent material from entering into soil, ditches, sewers, waterways, and/or groundwater. See Section 12, Ecological Information for more detailed information.
<b>Methods for Containment</b>	Vacuum or shovel waste into a drum and label contents for disposal.
<b>Methods for cleaning up</b>	Pick up and transfer to properly labeled containers. Keep in suitable and closed containers for disposal. Dispose of waste as indicated in Section 13.

### 7. HANDLING AND STORAGE

<b>Handling</b>	Use air conveying/mechanical systems for bulk transfer to storage. Provide appropriate exhaust ventilation at places where dust is formed. In case of insufficient ventilation, wear suitable respiratory equipment if release of airborne dust is expected.
<b>Storage</b>	Keep in a dry place. Keep away from incompatible products (acids). Do not store with strong smelling materials.
<b>Incompatible products</b>	Except under controlled conditions: Acids

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Control parameters

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies Local nuisance dust standards apply

#### Appropriate engineering controls

<b>Engineering measures</b>	Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction.
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#### Individual protection measures, such as personal protective equipment

<b>Eye/Face Protection</b>	Safety glasses with side-shields.
<b>Skin and Body Protection</b>	Wear suitable protective clothing. Protective shoes or boots.
<b>Hand Protection</b>	Protective gloves
<b>Respiratory Protection</b>	In case of inadequate ventilation wear respiratory protection.
<b>Hygiene measures</b>	Handle in accordance with good industrial hygiene and safety practice.
<b>General information</b>	If the product is used in mixtures, it is recommended that you contact the appropriate protective equipment suppliers

### 9. PHYSICAL AND CHEMICAL PROPERTIES

#### Information on basic physical and chemical properties

<b>Appearance</b>	Crystalline, Powder
<b>Physical State</b>	Solid
<b>Color</b>	White
<b>Odor</b>	odorless
<b>Odor threshold</b>	Not applicable
<b>pH</b>	8.3 (1% solution) @ 25 °C
<b>Melting point/freezing point</b>	Not applicable
<b>Boiling Point/Range</b>	No information available
<b>Flash point</b>	Not applicable
<b>Evaporation Rate</b>	No information available

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Flammability (solid, gas)	No information available
Flammability Limit in Air	
Upper flammability limit:	No information available
Lower flammability limit:	No information available
Vapor pressure	Negligible
Vapor density	No information available
Density	No information available
Specific gravity	2.22
Water solubility	96 g/L @ 20 °C
Solubility in other solvents	No information available
Partition coefficient	Not applicable
Autoignition temperature	No information available
Decomposition temperature	No information available
Viscosity, kinematic	No information available
Viscosity, dynamic	No information available
Explosive properties	No information available
Oxidizing properties	Non-oxidizing
Molecular weight	84.01
Bulk density	66 lb/cu ft

## 10. STABILITY AND REACTIVITY

Reactivity	None under normal use conditions.
Chemical Stability	Stable.
Possibility of Hazardous Reactions	None under normal processing.
Hazardous polymerization	Hazardous polymerization does not occur.
Conditions to avoid	Heat. Humid air. Avoid contact with acids except under controlled conditions. Keep away from strong odor.
Incompatible materials	Except under controlled conditions: Acids.
Hazardous Decomposition Products	Reacts with acids to release carbon dioxide gas and heat.

## 11. TOXICOLOGICAL INFORMATION

### Product Information

LD50 Oral	> 5,000 mg/kg (rat)
LD50 Dermal	No information available
LC50 Inhalation	> 4.74 mg/L (rat) 4.5 hr
Eye Contact	Non-irritating.
Skin Contact	Non-irritating
Sensitization	Non-sensitizing.

### Information on toxicological effects

Symptoms	No information available.
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### Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic toxicity	No known effect.
Mutagenicity	Not mutagenic.
Carcinogenicity	Not recognized as carcinogenic by Research Agencies (IARC, NTP, OSHA, ACGIH).
Reproductive toxicity	No information available.
STOT - single exposure	No information available.

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STOT - repeated exposure No information available.  
 Aspiration hazard No information available.

## 12. ECOLOGICAL INFORMATION

Ecotoxicity

Sodium Bicarbonate (144-55-8)				
Active Ingredient(s)	Duration	Species	Value	Units
Sodium bicarbonate	96 hr	Lepomis macrochirus (Bluefill sunfish)	NOEC: 5,200 LC50: 7,100	mg/L
Sodium bicarbonate	48 hr immobilisation test	Daphnia magna	NOEC: 3,100 EC50: 4,100	mg/L
Sodium bicarbonate	96 hr	Oncorhynchus mykiss (rainbow trout)	NOEC: 2,300 LC50: 7,700	mg/L

**Persistence and degradability** Biodegradability does not pertain to inorganic substances.

**Bioaccumulation** Does not bioaccumulate.

**Mobility** Dissociates into ions.

**Other Adverse Effects** None known.

## 13. DISPOSAL CONSIDERATIONS

**Waste disposal methods** This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). Dispose of in accordance with local regulations.

**Contaminated Packaging** Dispose of in accordance with local regulations.

## 14. TRANSPORT INFORMATION

DOT NOT REGULATED

## 15. REGULATORY INFORMATION

**U.S. Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**SARA 311/312 Hazard Categories**

Acute health hazard	No
Chronic health hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

**Clean Water Act**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

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**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

**US State Regulations**

**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**

This product does not contain any substances regulated by state right-to-know regulations

**International Inventories**

Component	TSCA (United States)	DSL (Canada)	EINECS/ELI NCS (Europe)	ENCS (Japan)	China (IECSC)	KECL (Korea)	PICCS (Philippines)	AICS (Australia)
Sodium Bicarbonate 144-55-8 ( 100 )	X	X	X	X	X	X	X	X

WHMIS Hazard Class                      Non-controlled

**16. OTHER INFORMATION**

NFPA	Health Hazards 0	Flammability 0	Instability 0	Special Hazards -
HMIS	Health Hazards 0	Flammability 0	Physical hazard 0	Personal Protection X

NFPA/HMIS Ratings Legend                      Severe = 4; Serious = 3; Moderate = 2; Slight = 1; Minimal = 0

**Product Certifications**

Products labeled USP meet the chemical testing specifications defined in the USP and Food Chemicals Codex (FCC), 8th Edition and are manufactured under GMP.

The MUL (maximum use level) for sodium bicarbonate is 100 mg/L under NSF/ANSI Standard 60.



Revision date:                                      2015-04-07  
 Revision note                                      Minor change

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**End of Safety Data Sheet**