

**SAFETY DATA SHEET**  
Sodium Bicarbonate

SDS #: 144-55-8-2  
Revision date: 2015-04-02  
Format: NA  
Version 3.01

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

## 10. STABILITY AND REACTIVITY

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

## 11. TOXICOLOGICAL INFORMATION

### Product Information

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

### Information on toxicological effects

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

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

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

**12. ECOLOGICAL INFORMATION**

Ecotoxicity

<b>Sodium Bicarbonate (144-55-8)</b>				
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

<b>Acute health hazard</b>	No
<b>Chronic health hazard</b>	No
<b>Fire hazard</b>	No
<b>Sudden release of pressure hazard</b>	No
<b>Reactive Hazard</b>	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

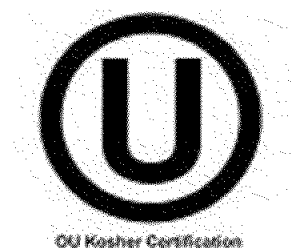
**16. OTHER INFORMATION**

<b>NFPA</b>	<b>Health Hazards</b> 0	<b>Flammability</b> 0	<b>Instability</b> 0	<b>Special Hazards</b> -
<b>HMIS</b>	<b>Health Hazards</b> 0	<b>Flammability</b> 0	<b>Physical hazard</b> 0	<b>Personal Protection</b> X

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

**Product Certifications**

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



**Revision date:** 2015-04-01  
**Revision note** Minor change

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**End of Safety Data Sheet**