

Name:	<b>Sodium Bicarbonate Material Safety Data Sheet</b>
Synonym:	Baking soda; Sodium acid carbonate; Sodium hydrogen carbonate; Monosodium carbonate; Bicarbonate of soda
CAS:	144-55-8

### Section 1 - Chemical Product

MSDS Name: Sodium Bicarbonate

Synonym: Baking soda; Sodium acid carbonate; Sodium hydrogen carbonate; Monosodium carbonate; Bicarbonate of soda.

### Section 2 - COMPOSITION, INFORMATION ON INGREDIENTS

CAS#	Chemical Name	content	EINECS#
144-55-8	Sodium bicarbonate	>99.7	205-633-8

Hazard Symbols: None Listed.

Risk Phrases: None Listed.

### Section 3 - HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

Not available.

Potential Health Effects

Eye:

Causes eye irritation. Causes redness and pain.

Skin:

May cause skin irritation. Repeated or prolonged exposure may cause drying and cracking of the skin.

Ingestion:

May cause irritation of the digestive tract.

Inhalation:

May cause respiratory tract irritation.

Chronic:

Prolonged or repeated skin contact may cause irritation.

### Section 4 - FIRST AID MEASURES

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper

and lower eyelids. Get medical aid. Do NOT allow victim to rub eyes or keep eyes closed.

Skin:

Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. Wash clothing before reuse.

Ingestion:

Never give anything by mouth to an unconscious person. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water. Get medical aid if irritation or symptoms occur.

Inhalation:

Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.

Notes to Physician:

Treat symptomatically and supportively.

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## **Section 5 - FIRE FIGHTING MEASURES**

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Material will not burn.

Extinguishing Media:

Use extinguishing media most appropriate for the surrounding fire.

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## **Section 6 - ACCIDENTAL RELEASE MEASURES**

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions.

Provide ventilation. Do not get water inside containers.

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## **Section 7 - HANDLING and STORAGE**

Handling:

Use with adequate ventilation. Minimize dust generation and accumulation. Avoid prolonged or repeated contact with skin. Avoid breathing vapors from heated material.

Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation. Do not allow contact with water. Keep from contact with moist air and steam.

Storage:

Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Store protected from moisture.

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## **Section 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION**

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits CAS# 144-55-8: Personal Protective Equipment Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

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## **Section 9 - PHYSICAL AND CHEMICAL PROPERTIES**

Physical State: Crystals

Color: white

Odor: odorless

pH: 8.3 (0.1M solution)

Vapor Pressure: Not available.

Viscosity: Not available.

Boiling Point: Not available.

Freezing/Melting Point: 270 deg C

Autoignition Temperature: Not applicable.

Flash Point: Not applicable.

Explosion Limits, lower: Not available.

Explosion Limits, upper: Not available.

Decomposition Temperature: 270 deg C

Solubility in water: Soluble.

Specific Gravity/Density: 2.16

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

Molecular Weight: 83.995

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### **Section 10 - STABILITY AND REACTIVITY**

Chemical Stability:

Stable in dry air, but slowly decomposes in moist air.

Conditions to Avoid:

Dust generation, moisture, excess heat.

Incompatibilities with Other Materials:

Moisture.

Hazardous Decomposition Products:

Carbon monoxide, carbon dioxide.

Hazardous Polymerization: Has not been reported.

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### **Section 11 - TOXICOLOGICAL INFORMATION**

RTECS#:

CAS# 144-55-8: VZ0950000 LD50/LC50:

CAS# 144-55-8: Draize test, rabbit, eye: 100 mg/30S Mild; Oral, mouse: LD50 = 3360 mg/kg; Oral, rat: LD50 = 4220 mg/kg.

Carcinogenicity:

Sodium bicarbonate - Not listed by ACGIH, IARC, or NTP.

Other:

See actual entry in RTECS for complete information.

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### **Section 12 - ECOLOGICAL INFORMATION**

Other No information available.

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### **Section 13 - DISPOSAL CONSIDERATIONS**

Products which are considered hazardous for supply are classified as Special Waste and the disposal of such chemicals is covered by regulations which may vary according to location. Contact a specialist disposal company or the local waste regulator for advice.

Empty containers must be decontaminated before returning for recycling.

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## **Section 14 - TRANSPORT INFORMATION**

IATA

Shipping Name: Not regulated.

Hazard Class:

UN Number:

Packing Group:

IMO

Shipping Name: Not regulated.

Hazard Class:

UN Number:

Packing Group:

RID/ADR

Shipping Name: Not regulated.

Hazard Class:

UN Number:

Packing group:

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## **Section 15 - REGULATORY INFORMATION**

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: Not available.

Risk Phrases:

Safety Phrases:

WGK (Water Danger/Protection)

CAS# 144-55-8: 0

Canada

CAS# 144-55-8 is listed on Canada's DSL List.

CAS# 144-55-8 is not listed on Canada's Ingredient Disclosure List.

US FEDERAL

TSCA

CAS# 144-55-8 is listed on the TSCA inventory.