

**MATERIAL SAFETY DATA SHEET****I - PRODUCT IDENTIFICATION**

Product: Sodium Bicarbonate  
Synonyms: Alkalinity Increaser  
Formula:  $\text{NaHCO}_3$   
CAS Number: 144-55-8

**II - TRANSPORTATION DATA**

U.S. Department of Transportation - 49 CFR

Emergency Telephone Number: Chemtrec 800-424-9300

**III - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION**

<u>Chemical or Common Name</u>	<u>Percent</u>	<u>CAS Number</u>
Sodium Bicarbonate	99%	144-55-8

**IV - PHYSICAL/CHEMICAL CHARACTERISTICS**

Odor: none  
Appearance: white  
Molecular Weight: 84.01  
Bulk Density: 980 g/l  
Melting Point: decomposes without melting to release  $\text{CO}_2$  and  $\text{Na}_2\text{CO}_3\text{-H}_2\text{O}$

**V - FIRE AND EXPLOSION HAZARD DATA**

Flash Point:  
Non flammable  
Permissible Exposure Level (PEL):  
15 mg/m<sup>3</sup>

**VI - REACTIVITY DATA**

Stability:  
( ) Unstable (X) Stable  
Stable in dry air. In moist air, forms sodium carbonate, an irritant  
Conditions to Avoid:  
Exposure to incompatible materials and heat  
Incompatibility:  
Acids, monoammonium phosphate, aluminum and phosphorus pentoxide

## Hazardous Decomposition or By-Products:

Decomposes when exposed to high heat, releasing carbon dioxide. Carbon dioxide is an asphyxiant and may affect respiration rate or interfere with breathing

## Hazardous Polymerization:

( ) May Occur      (X) Will Not Occur

## **VII - PRECAUTIONS FOR SAFE HANDLING AND USE**

### Steps To Be Taken In Case Material Is Spilled Or Released:

#### Land spill:

Shovel or sweep up and place in container for disposal.

#### Water spill:

Disperse with water jets, propellers or similar device

### Waste Disposal Method:

Dispose of industrial waste or wash to an industrial sewer as permitted by all federal, state and local regulations

### Precautions to Be Taken in Handling and Storage:

Avoid contact with eyes, skin and clothing. Avoid breathing dust. Store in cool, dry area away from acids

### Other:

Wash thoroughly after handling material

## **VIII - HEALTH HAZARD DATA**

### Signs & Symptoms of Exposure:

#### Eyes:

Can cause irritation

#### Skin:

Can cause irritation

### Effects of overexposure to Material:

Ingestion: irritation

Inhalation: breathing or respiratory disorders will be aggravated by exposure to chemical

Skin Contact: irritation and redness

Eye Contact: irritation or redness

### Emergency and First Aid Procedures:

Ingestion: if swallowed, induce vomiting immediately by giving two glasses of water and touching finger to back of throat. Never give anything by mouth to an unconscious person. Consult a physician

Inhalation: remove to fresh air

Skin Contact: thoroughly wash exposed area with water

Eye Contact: flush with large amounts of water. See physician

## **IX - CONTROL MEASURES**

## Exposure Control/Personal Protection:

Respiratory: use NIOSH approved dust respirator

Ventilation: use general dilution and local exhaust techniques to meet nuisance dust exposure limit

Skin: gloves of rubber, neoprene or similar material that will not allow alkaline solutions to penetrate

Eye: safety glasses or safety goggles

Hygiene: easily washable clothing. Wash clothing before reuse

## X - TOXICITY

Oral LDLo:

1260 mg/kg infant

Oral LD50:

4220 mg/kg rat

Skin Irritant:

30 mg/3 days mild rabbit

## XI - ADDITIONAL INFORMATION

**ALWAYS COMPLY WITH ALL APPLICABLE INTERNATIONAL, FEDERAL, STATE AND LOCAL REGULATIONS REGARDING THE TRANSPORTATION, STORAGE, USE AND DISPOSAL OF THIS CHEMICAL.**

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