

# Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 01.06.2015

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## Sodium Bicarbonate, Reagent

### SECTION 1 : Identification of the substance/mixture and of the supplier

**Product name :** Sodium Bicarbonate, Reagent

**Manufacturer/Supplier Trade name:**

**Manufacturer/Supplier Article number: S25533**

**Recommended uses of the product and uses restrictions on use:**

**Manufacturer Details:**

AquaPhoenix Scientific  
9 Barnhart Drive, Hanover, PA 17331

**Supplier Details:**

Fisher Science Education  
15 Jet View Drive, Rochester, NY 14624

**Emergency telephone number:**

Fisher Science Education Emergency Telephone No.: 800-535-5053

### SECTION 2 : Hazards identification

**Classification of the substance or mixture:**

Not classified for physical or health hazards under GHS.

**Hazard statements:**

**Precautionary statements:**

If medical advice is needed, have product container or label at hand  
Keep out of reach of children  
Read label before use

**Combustible Dust Hazard :**

May form combustible dust concentrations in air (during processing).

**Other Non-GHS Classification:**

**WHMIS  
NFPA/HMIS**



NFPA SCALE (0-4)

Health	2
Flammability	0
Physical Hazard	1
Personal Protection	X

HMIS RATINGS (0-4)

### SECTION 3 : Composition/information on ingredients

**Ingredients:**

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CAS 144-55-8	Sodium Bicarbonate	100 %
Percentages are by weight		

### SECTION 4 : First aid measures

#### Description of first aid measures

**After inhalation:** Move exposed individual to fresh air. Loosen clothing as necessary and position individual in a comfortable position. Seek medical advice if discomfort or irritation persists. If breathing is difficult give oxygen. Get medical assistance if cough or other symptoms appear.

**After skin contact:** Wash affected area with soap and water. Seek medical advice if discomfort or irritation persists.

**After eye contact:** Protect unexposed eye. Rinse or flush exposed eye gently using water for 15-20 minutes. Remove contact lenses while rinsing. Immediately get medical assistance.

**After swallowing:** Do not induce vomiting. Dilute mouth with water or milk after rinsing. Get medical assistance.

#### Most important symptoms and effects, both acute and delayed:

Shortness of breath. Irritation. Nausea. Headache.; May cause adverse liver effects.

#### Indication of any immediate medical attention and special treatment needed:

If seeking medical attention provide SDS document to physician. Physician should treat symptomatically.

### SECTION 5 : Firefighting measures

#### Extinguishing media

**Suitable extinguishing agents:** Use water, dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam.

**For safety reasons unsuitable extinguishing agents:**

#### Special hazards arising from the substance or mixture:

Thermal decomposition can lead to release of irritating gases and vapors.

#### Advice for firefighters:

**Protective equipment:** Wear protective eyewear, gloves, and clothing. Refer to Section 8.

**Additional information (precautions):** Avoid contact with skin, eyes, and clothing. Avoid generating dust.

### SECTION 6 : Accidental release measures

#### Personal precautions, protective equipment and emergency procedures:

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type AXBEK (EN 14387) respirator cartridges as a backup to engineering controls. Wear equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

#### Environmental precautions:

Should not be released into environment.

#### Methods and material for containment and cleaning up:

Absorb and containerize for disposal. Avoid generating dust. Follow proper disposal methods. Refer to Section 13.

#### Reference to other sections:

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### SECTION 7 : Handling and storage

#### Precautions for safe handling:

Wash hands after handling. Follow good hygiene procedures when handling chemical materials. Refer to Section 8. Do not inhale gases, fumes, dust, mist, vapor, and aerosols. Do not eat, drink, smoke, or use personal products when handling chemical substances. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Do not eat, drink, smoke, or use personal products when handling chemical substances.

#### Conditions for safe storage, including any incompatibilities:

Store in a cool location. Provide ventilation for containers. Keep container tightly sealed. Store away from incompatible materials. Refer to Section 5 and 10. Protect from freezing and physical damage.

### SECTION 8 : Exposure controls/personal protection



#### Control Parameters:

, , OSHA PEL TWA (Total Dust) 15 mg/m<sup>3</sup> (50 mppcf\*)  
, , ACGIH TLV TWA (inhalable particles) 10 mg/m<sup>3</sup>

#### Appropriate Engineering controls:

It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen deficient environment. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above. Normal ventilation is adequate.

#### Respiratory protection:

Not required under normal conditions of use.

#### Protection of skin:

Select glove material impermeable and resistant to the substance. Select glove material based on rates of diffusion and degradation. Wear protective clothing.

#### Eye protection:

Safety glasses with side shields or goggles.

#### General hygienic measures:

Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin. Wash hands and exposed skin with soap and plenty of water. Perform routine housekeeping to prevent dust generation. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.

### SECTION 9 : Physical and chemical properties

<b>Appearance (physical state,color):</b>	White powder	<b>Explosion limit lower: Explosion limit upper:</b>	Non Explosive Non Explosive
<b>Odor:</b>	Odorless	<b>Vapor pressure:</b>	Not Applicable
<b>Odor threshold:</b>	Not Applicable	<b>Vapor density:</b>	Not Applicable
<b>pH-value:</b>	Not Available	<b>Relative density:</b>	Not Available
<b>Melting/Freezing point:</b>	270°C	<b>Solubilities:</b>	Slightly soluble in water

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<b>Boiling point/Boiling range:</b>	Not Available	<b>Partition coefficient (n-octanol/water):</b>	Not Available
<b>Flash point (closed cup):</b>	Not Applicable	<b>Auto/Self-ignition temperature:</b>	Not Applicable
<b>Evaporation rate:</b>	Not Available	<b>Decomposition temperature:</b>	>50C
<b>Flammability (solid,gaseous):</b>	Not Applicable	<b>Viscosity:</b>	a. Kinematic:Not Applicable b. Dynamic: Not Applicable
<b>Density:</b> Not Available			

### SECTION 10 : Stability and reactivity

**Reactivity:**None under normal processing.

**Chemical stability:**moisture sensitive.Heat sensitive.

**Possible hazardous reactions:**Thermal decomposition can lead to release of irritating gases and vapors.

**Conditions to avoid:**Exposure to moisture or water. temperatures above 50C. Dust generation.Incompatible Materials.

**Incompatible materials:**Strong oxidizers.Strong acids.

**Hazardous decomposition products:**Carbon oxides.Sodium oxides.

### SECTION 11 : Toxicological information

<b>Acute Toxicity:</b>		
<b>Oral:</b>	4220 mg/kg	LD50 Oral - rat
<b>Inhalation:</b>	4.74 mg/l	LC Inhalation - rat
<b>Chronic Toxicity:</b> No additional information.		
<b>Corrosion Irritation:</b> No additional information.		
<b>Sensitization:</b>	No additional information.	
<b>Single Target Organ (STOT):</b>	No additional information.	
<b>Numerical Measures:</b>	No additional information.	
<b>Carcinogenicity:</b>	No additional information.	
<b>Mutagenicity:</b>	No additional information.	
<b>Reproductive Toxicity:</b>	No additional information.	

### SECTION 12 : Ecological information

#### Ecotoxicity

**Fish: LC50 (96h) L. macrochius:** 8250-9000 mg/L

**Crustacea: EC50 (48h) D. magna:** 2350 mg/L

**Persistence and degradability:**

**Bioaccumulative potential:**

**Mobility in soil:**

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Other adverse effects:

### SECTION 13 : Disposal considerations

Waste disposal recommendations:

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations. Ensure complete and accurate classification.

### SECTION 14 : Transport information

UN-Number

Not Dangerous Goods

UN proper shipping name

Not Dangerous Goods

Transport hazard class(es)

Packing group: Not Dangerous Goods

Environmental hazard:

Transport in bulk:

Special precautions for user:

### SECTION 15 : Regulatory information

United States (USA)

**SARA Section 311/312 (Specific toxic chemical listings):**

None of the ingredients is listed

**SARA Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed

**RCRA (hazardous waste code):**

None of the ingredients is listed

**TSCA (Toxic Substances Control Act):**

144-55-8 Not Regulated.

**CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):**

None of the ingredients is listed

Proposition 65 (California):

**Chemicals known to cause cancer:**

None of the ingredients is listed

**Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed

**Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed

**Chemicals known to cause developmental toxicity:**

None of the ingredients is listed

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#### Canada

##### Canadian Domestic Substances List (DSL):

144-55-8 Not Regulated.

##### Canadian NPRI Ingredient Disclosure list (limit 0.1%):

None of the ingredients is listed

##### Canadian NPRI Ingredient Disclosure list (limit 1%):

None of the ingredients is listed

#### SECTION 16 : Other information

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. Note: The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

##### GHS Full Text Phrases:

##### Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods

PNEC: Predicted No-Effect Concentration (REACH)

CFR: Code of Federal Regulations (USA)

SARA: Superfund Amendments and Reauthorization Act (USA)

RCRA: Resource Conservation and Recovery Act (USA)

TSCA: Toxic Substances Control Act (USA)

NPRI: National Pollutant Release Inventory (Canada)

DOT: US Department of Transportation

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienists

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

WHMIS: Workplace Hazardous Materials Information System (Canada)

DNEL: Derived No-Effect Level (REACH)

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