



# 0.1M Sodium Bicarbonate-Sodium Carbonate Buffer, pH 9.6 ±0.2, 1X Powdered Blend

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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### SECTION 1: Identification

#### 1.1. Identification

Product form : Mixture  
Trade name : 0.1M Sodium Bicarbonate-Sodium Carbonate Buffer, pH 9.6 ±0.2, 1X Powdered Blend  
Product code : 24094  
Formula : no data

#### 1.2. Recommended use and restrictions on use

Recommended use : Use as laboratory reagent, Manufacture of substances

#### 1.3. Supplier

##### Supplier

Polysciences  
400 Valley Road  
Warrington, PA 18976 - United States  
T +1 215 343 6484 - F +1 215 343 0214  
[info@polysciences.com](mailto:info@polysciences.com) - [www.polysciences.com](http://www.polysciences.com)

#### 1.4. Emergency telephone number

Emergency number : 24-hour emergency phone number ChemTel 1-800-255-3924

### SECTION 2: Hazard(s) identification

#### 2.1. Classification of the substance or mixture

##### GHS US classification

Serious eye damage/eye irritation Category 2A Causes serious eye irritation

#### 2.2. GHS Label elements, including precautionary statements

##### GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) : Warning  
Hazard statements (GHS US) : Causes serious eye irritation  
Precautionary statements (GHS US) : Wash hands, forearms and face thoroughly after handling.  
Wear protective gloves/protective clothing/eye protection/face protection.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
If eye irritation persists: Get medical advice/attention

#### 2.3. Other hazards which do not result in classification

No additional information available

#### 2.4. Unknown acute toxicity (GHS US)

Not applicable

### SECTION 3: Composition/Information on ingredients

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

Name	Product identifier	%	GHS US classification
Sodium bicarbonate	(CAS-No.) 144-55-8	71 – 80	Not classified
Disodium carbonate	(CAS-No.) 497-19-8	31 – 40	Eye Irrit. 2, H319

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Full text of hazard classes and H-statements : see section 16

### SECTION 4: First-aid measures

#### 4.1. Description of first aid measures

- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
- First-aid measures after skin contact : Wash skin with plenty of water.
- First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
- First-aid measures after ingestion : Call a poison center/doctor/physician if you feel unwell.

#### 4.2. Most important symptoms and effects (acute and delayed)

- Symptoms/effects after eye contact : Eye irritation.

#### 4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

### SECTION 5: Fire-fighting measures

#### 5.1. Suitable (and unsuitable) extinguishing media

- Suitable extinguishing media : Water spray. Dry powder. Foam.

#### 5.2. Specific hazards arising from the chemical

- Hazardous decomposition products in case of fire : Toxic fumes may be released.

#### 5.3. Special protective equipment and precautions for fire-fighters

- Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

- Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes.

##### 6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

#### 6.2. Environmental precautions

Avoid release to the environment.

#### 6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Mechanically recover the product.
- Other information : Dispose of materials or solid residues at an authorized site.

#### 6.4. Reference to other sections

For further information refer to section 13.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal protective equipment.
- Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

#### 7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Store at room temp. Store in a well-ventilated place. Keep cool.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

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No additional information available

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### Sodium bicarbonate (144-55-8)

No additional information available

### Disodium carbonate (497-19-8)

No additional information available

## 8.2. Appropriate engineering controls

- Appropriate engineering controls : Ensure good ventilation of the work station.  
Environmental exposure controls : Avoid release to the environment.

## 8.3. Individual protection measures/Personal protective equipment

### Hand protection:

Protective gloves

### Eye protection:

Safety glasses

### Skin and body protection:

Wear suitable protective clothing

### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

### Personal protective equipment symbol(s):



## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: White powder.
Color	: Mixture contains one or more component(s) which have the following colour(s): white Gray
Odor	: Mixture contains one or more component(s) which have the following odour:
Odor threshold	: No data available
pH	: ≥ 8.3
Melting point	: 140
Freezing point	: Not applicable
Boiling point	: no data
Flash point	: Not applicable
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Non flammable.
Vapor pressure	: no data
Relative vapor density at 20°C	: no data
Relative density	: No data available
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: Not applicable
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available

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Explosion limits	: Not applicable
Explosive properties	: No data available
Oxidizing properties	: No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

0.1M Sodium Bicarbonate-Sodium Carbonate Buffer, pH 9.6 ±0.2, 1X Powdered Blend	
LD50 oral rat	4220
ATE US (oral)	4220 mg/kg body weight
Sodium bicarbonate (144-55-8)	
LD50 oral rat	4220 mg/kg
Disodium carbonate (497-19-8)	
LD50 oral rat	4090 mg/kg
LD50 dermal rabbit	> 2000 mg/kg body weight Animal: rabbit, Guideline: other:EPA 16 CFR 1500.40
LC50 Inhalation - Rat	(Exposure time: 2 h)

Skin corrosion/irritation	: Not classified pH: ≥ 8.3
Serious eye damage/irritation	: Causes serious eye irritation. pH: ≥ 8.3
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available
Symptoms/effects after eye contact	: Eye irritation.

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### SECTION 12: Ecological information

#### 12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

<b>Sodium bicarbonate (144-55-8)</b>	
LC50 fish 1	8250 – 9000 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
EC50 Daphnia 1	2350 mg/l (Exposure time: 48 h - Species: Daphnia magna)
NOEC (chronic)	> 576 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

  

<b>Disodium carbonate (497-19-8)</b>	
LC50 fish 1	300 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
EC50 Daphnia 1	265 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 fish 2	310 – 1220 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])

#### 12.2. Persistence and degradability

No additional information available

#### 12.3. Bioaccumulative potential

<b>Disodium carbonate (497-19-8)</b>	
BCF fish 1	(no bioaccumulation)

#### 12.4. Mobility in soil

No additional information available

#### 12.5. Other adverse effects

No additional information available

### SECTION 13: Disposal considerations

#### 13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

### SECTION 14: Transport information

#### Department of Transportation (DOT)

In accordance with DOT

Not applicable

#### Transportation of Dangerous Goods

Not applicable

#### Transport by sea

Not applicable

#### Air transport

Not applicable

### SECTION 15: Regulatory information

#### 15.1. US Federal regulations

<b>Sodium bicarbonate (144-55-8)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

  

<b>Disodium carbonate (497-19-8)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

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### 15.2. International regulations

#### CANADA

<b>Sodium bicarbonate (144-55-8)</b>
Listed on the Canadian DSL (Domestic Substances List)
<b>Disodium carbonate (497-19-8)</b>
Listed on the Canadian DSL (Domestic Substances List)

#### EU-Regulations

##### National regulations

No additional information available

### 15.3. US State regulations

## SECTION 16: Other information

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#### Hazard Rating

##### Health

: 1 Slight Hazard - Irritation or minor reversible injury possible

##### Flammability

: 1 Slight Hazard - Materials that must be preheated before ignition will occur. Includes liquids, solids and semi solids having a flash point above 200 F. (Class IIIB)

##### Physical

: 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

SDS US (GHS HazCom 2012)

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