

## Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. Product Identifier

SDS # MEL-003-EU  
 Product Name HYDRION BUFFER pH-10.00

Contains Sodium carbonate  
 Molecular weight Sodium Carbonate 105.99 grams  
 Sodium Bicarbonate 84.01 grams

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended Use For preparation of buffer standards in distilled water

### 1.3. Details of the Supplier of the Safety Data Sheet

#### Supplier

MICRO ESSENTIAL LABORATORY, INC  
 PO BOX 100824, 4224 AVENUE H  
 BROOKLYN, NY 11210

#### For further information, please contact

Contact Point Micro Essential Laboratory Inc. 718-338-3618  
 Email Address [custserv@microessentiallab.com](mailto:custserv@microessentiallab.com)

### 1.4. Emergency telephone number

Emergency Telephone (24 hr) INFOTRAC 1-352-323-3500 (International)  
 1-800-535-5053 (North America)

## Section 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the Substance or Mixture

*Regulation (EC) No 1272/2008*

Acute toxicity - Inhalation (Dusts/Mists)	Category 4 - (H332)
Serious eye damage/eye irritation	Category 2 - (H319)

### 2.2. Label Elements

Product Identifier  
 Contains Sodium carbonate



Signal Word  
 Warning

**Hazard statements**

H319 - Causes serious eye irritation  
 H332 - Harmful if inhaled

**Precautionary Statements - EU (§28, 1272/2008)**

P261 - Avoid breathing dust/fume/gas/mist/vapours/spray  
 P264 - Wash face, hands and any exposed skin thoroughly after handling  
 P271 - Use only outdoors or in a well-ventilated area  
 P280 - Wear eye protection/ face protection  
 P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
 P312 - Call a POISON CENTER or doctor if you feel unwell  
 P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 P337 + P313 - If eye irritation persists: Get medical advice/attention

**2.3. Other Hazards**

No information available

**Section 3: COMPOSITION/INFORMATION ON INGREDIENTS****3.2 MIXTURES**

Chemical name	EC No	CAS No	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH Registration Number
Sodium carbonate	Present	497-19-8	50-70	Eye Irrit. 2 (H319)	Not determined

**Full text of H- and EUH-phrases: see section 16**

This product does not contain candidate substances of very high concern at a concentration  $\geq 0.1\%$  (Regulation (EC) No. 1907/2006 (REACH), Article 59)

**Section 4: FIRST AID MEASURES****4.1. Description of First Aid Measures**

<b>Eye Contact</b>	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.
<b>Skin Contact</b>	Wash affected areas thoroughly with soap and water for at least 15 minutes. Get medical attention if necessary.
<b>Inhalation</b>	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If breathing is difficult, give oxygen. Call a poison center or doctor/physician if you feel unwell.
<b>Ingestion</b>	Drink plenty of water. Do not induce vomiting without medical advice. Get medical attention if necessary.

**4.2. Most Important Symptoms and Effects, Both Acute and Delayed**

<b>Symptoms</b>	Dust may be irritating to eyes. Prolonged skin contact may cause skin irritation or allergic reaction. The eye irritation may be severe. Ingestion can irritate stomach and cause mouth burns. Prolonged exposure by inhalation may cause irritation of the nose, throat and respiratory tract. Prolonged exposure to BULK POWDER may cause irritation to the eyes, skin and respiratory system.
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**4.3. Indication of any Immediate Medical Attention and Special Treatment Needed**

<b>Notes to Physician</b>	Treat symptomatically.
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## Section 5: FIREFIGHTING MEASURES

### 5.1. Extinguishing Media

#### **Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

#### **Unsuitable Extinguishing Media**

Not determined.

### 5.2. Special Hazards Arising from the Substance or Mixture

Non-flammable.

### 5.3. Advice for Firefighters

Wear self-contained breathing apparatus and protective suit. Use personal protective equipment as required. Do not release runoff from fire control methods to sewers or waterways.

## Section 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

#### **Personal Precautions**

Use personal protective equipment as required. Keep unnecessary people away, isolate hazard area and deny entry. Restrict access to area until completion of clean-up. Ensure clean-up is conducted by trained personnel only.

#### **For Emergency Responders**

Use personal protection recommended in Section 8.

### 6.2. Environmental Precautions

Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information. See Section 13: DISPOSAL CONSIDERATIONS.

### 6.3. Methods and Material for Containment and Cleaning Up

#### **Methods for Containment**

Prevent further leakage or spillage if safe to do so.

#### **Methods for Clean-Up**

Cover spilled material with a dry acid, such as Citric or Boric. Scoop up into a large beaker. Adjust pH between 6 and 9 with a diluted acid, such as Sulfuric or Citric. Flush reacted material to the drain with a large excess of water but ONLY if permitted by local authorities and regulations. If not permitted, must be disposed of as a hazardous waste.

### 6.4. Reference to Other Sections

See Section 13: DISPOSAL CONSIDERATIONS.

## Section 7: HANDLING AND STORAGE

### 7.1. Precautions for Safe Handling

#### **Advice on Safe Handling**

Handle in accordance with good industrial hygiene and safety practice. Use personal protection recommended in Section 8. Do not breathe dust. Avoid contact with skin, eyes or clothing. Wash face, hands and any exposed skin thoroughly after handling. Do NOT take internally. The following precautions pertain only to BULK POWDER handling:

Ventilation: Use adequate general or local ventilation to keep fume and dust levels as low as possible

Respiratory Protection: Use approved dust respirator when handling bulk powder

Eye Protection: Chemical splash goggles with side shields when handling bulk powder

Gloves: Natural rubber, butyl neoprene or equivalent. Wear full cover clothing when handling bulk powder.

**General Hygiene Considerations**

Handle in accordance with good industrial hygiene and safety practice. Contaminated Equipment: Separate contaminated work clothes from street clothes. Launder before reuse. Remove this material from your shoes and clean personal protective equipment. Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

**7.2. Conditions for Safe Storage, Including any Incompatibilities****Storage Conditions**

Keep container tightly closed and store in a cool, dry and well-ventilated place. Avoid excessive temperatures & high humidity.

**7.3. Specific End Use(s)****Specific Use(s)**

For preparation of buffer standards in distilled water.

**Risk Management Methods (RMM)**

The information required is contained in this Safety Data Sheet.

**Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION****8.1. Control Parameters****Exposure Limits**

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region-specific regulatory bodies.

**8.2. Exposure Controls****Engineering Controls**

Ensure adequate ventilation, especially in confined areas. Eyewash stations. Showers. Local exhaust ventilation recommended.

**Personal Protective Equipment****Eye/Face Protection**

Use approved safety goggles or safety glasses. If necessary, refer to appropriate regulations and standards. Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with, contact lenses.

**Hand Protection**

Use chemical resistant gloves for prolonged skin contact.

**Skin and Body Protection**

Gloves and protective clothing should be worn to prevent prolonged skin contact.

**Respiratory Protection**

Seek professional advice prior to respirator selection and use. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. **WARNING!** Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

**Section 9: PHYSICAL AND CHEMICAL PROPERTIES****9.1. Information on Basic Physical and Chemical Properties**

<b>Physical state</b>	Solid		
<b>Appearance</b>	White to off white Granules, crystals or powder	<b>Odour</b>	Odourless
<b>Colour</b>	White to off white	<b>Odour Threshold</b>	Not determined

<b><u>Property</u></b>	<b><u>Values</u></b>	<b><u>Remarks • Method</u></b>
<b>pH</b>	10.00	
<b>Melting point / freezing point</b>	Not determined	
<b>Boiling point / boiling range</b>	100 °C / 212 °F	
<b>Flash point</b>	Non-flammable	
<b>Evaporation Rate</b>	Not determined	
<b>Flammability (Solid, Gas)</b>	Not determined	
<b>Flammability Limit in Air</b>		
<b>Upper flammability or explosive limits</b>	Not determined	

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
Lower flammability or explosive limits	Not determined	
Vapour Pressure	Not determined	
Vapour Density	Not determined	
Relative Density	~1	@ 60°F (ASTM D 1298)
Water Solubility	Miscible in water	
Solubility(ies)	Not determined	
Partition Coefficient	Not determined	
Autoignition temperature	Not determined	
Decomposition temperature	Not determined	
Kinematic viscosity	Not determined	
Dynamic Viscosity	Not determined	
Explosive Properties	Not determined	
Oxidising Properties	Not determined	

**9.2. Other information**

<b>Molecular weight</b>	Sodium Carbonate 105.99 grams Sodium Bicarbonate 84.01 grams
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**Section 10: STABILITY AND REACTIVITY****10.1. Reactivity**

Not reactive under normal conditions.

**10.2. Chemical stability**

Stable under normal conditions.

**10.3. Possibility of Hazardous Reactions****Hazardous Polymerisation**

Hazardous polymerisation does not occur.

**Possibility of Hazardous Reactions**

See below - Incompatible Materials.

**10.4. Conditions to Avoid**

Keep out of reach of children.

**10.5. Incompatible Materials**

Hazardous reaction in aqueous solution may occur with strong acid, aluminum, fluorine, phosphorus pentoxide and ammonium phosphate monobasic.

**10.6. Hazardous Decomposition Products**

Toxic fumes of carbon monoxide or irritant smoke.

**Section 11: TOXICOLOGICAL INFORMATION****11.1. Information on Toxicological Effects****Acute toxicity****Product Information**

Inhalation	Harmful if inhaled.
Eye Contact	Avoid contact with eyes.
Skin Contact	Avoid contact with skin.
Ingestion	May be harmful if swallowed.

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 4,141.00 mg/kg

ATEmix (inhalation-dust/mist) 2.50 mg/L

#### Unknown Acute Toxicity

0 % of the mixture consists of ingredient(s) of unknown toxicity.

0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.

0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.

0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).

0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapour).

0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

#### Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Sodium carbonate	= 4090 mg/kg (Rat)		
Sodium Bicarbonate	= 4220 mg/kg (Rat)		

<b>Skin corrosion/irritation</b>	Not classified.
<b>Serious eye damage/eye irritation</b>	Causes serious eye irritation.
<b>Sensitisation</b>	Not classified.
<b>Germ cell mutagenicity</b>	Not classified.
<b>Carcinogenicity</b>	Not classified.
<b>Reproductive toxicity</b>	Not classified.
<b>STOT - single exposure</b>	Not classified.
<b>STOT - repeated exposure</b>	Not classified.
<b>Aspiration hazard</b>	Not classified.

## Section 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity

This product can be harmful or fatal to contaminated aquatic plant or animal life, especially if released in a large quantity in a body of water.

Chemical name	Algae/aquatic plants	Fish	Crustacea
Sodium carbonate	242: 120 h Nitzschia mg/L EC50	300: 96 h Lepomis macrochirus mg/L LC50 static 310 - 1220: 96 h Pimephales promelas mg/L LC50 static	265: 48 h Daphnia magna mg/L EC50

### 12.2. Persistence and Degradability

Not determined.

### 12.3. Bioaccumulative Potential

There is no data for this product.

### 12.4. Mobility in Soil

#### **Mobility**

Not determined.

**12.5. Results of PBT and vPvB Assessment**

Not determined.

**12.6. Other Adverse Effects**

Not determined.

**Section 13: DISPOSAL CONSIDERATIONS**

**13.1. Waste Treatment Methods**

**Waste from residues/unused products**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated Packaging**

Improper disposal or reuse of this container may be dangerous and illegal.

**Section 14: TRANSPORT INFORMATION**

**IMDG**

14.2 Proper Shipping Name Not regulated

**RID**

14.2 Proper Shipping Name Not regulated

**ADR**

14.2 Proper Shipping Name Not regulated

**IATA**

14.2 Proper Shipping Name Not regulated

**Section 15: REGULATORY INFORMATION**

**15.1. Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture**

**European Union**

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

**Authorisations and/or restrictions on use:**

This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

**Persistent Organic Pollutants**

Not applicable

**Ozone-depleting substances (ODS) regulation (EC) 1005/2009**

Not applicable

**International Inventories**

Component	TSCA	DSL/NDSL	EINECS/ELINCS	PICCS	ENCS	IECSC	AICS	KECL
Sodium carbonate 497-19-8 (50-70)	X	X	X	X	X	X	X	X
Sodium Bicarbonate 144-55-8 (30-50)	X	X	X	X	X	X	X	X

**Legend**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances

**15.2. Chemical Safety Assessment**

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

**Section 16: OTHER INFORMATION****Full text of H-Statements referred to under section 3**

H319 - Causes serious eye irritation

**Legend**

SVHC: Substances of Very High Concern for Authorisation:

**Legend**

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

**Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION****Classification Procedure**

Calculation method

**Issue Date:** 15-Feb-2012

**Revision Date:** 12-Aug-2019

**Revision Note:** Regulatory review.

**This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2015/830**

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet