

## SAFETY DATA SHEET

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### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: pH 10 Buffer  
Product Number: 57006

Pyxis Lab, Inc.  
1729 Majestic Drive, Suite 5  
Lafayette CO, 80026  
866-203-8397

Emergency Telephone Numbers:  
  
Chemtrec: 800-262-8200

Chemical Name: Not applicable  
CAS Number: Not applicable  
Additional CAS No. (for hydrated forms): Not applicable  
Chemical Formula: Not applicable  
Chemical Family: Not applicable  
Intended Use: Buffer

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### 2. HAZARDS IDENTIFICATION

GHS Classification:  
Hazard categories: Not applicable

GHS Label Elements:  
Not applicable

Hazard statements: Not applicable  
Precautionary statements: Not applicable

HMI S:  
Health: 1  
Flammability: 0  
Reactivity: 0  
Protective Equipment: X - See protective equipment, Section 8.

NFPA:  
Health: 0  
Flammability: 0  
Reactivity: 0  
Symbol: Not applicable

WHMI S Hazard Classification: Not applicable  
WHMI S Symbols: Not applicable

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### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Components according to GHS:

Sodium Carbonate

CAS Number: 497-19-8  
Chemical Formula:  $\text{Na}_2\text{CO}_3$   
GHS Classification: Eye Irrit. 2, H319; Acute Tox. Inh. 4, H332; Acute Tox. Or. 5, H303  
Percent Range (Trade Secret): < 0.5  
Percent Range Units: weight / weight  
PEL: Not established  
TLV: Not established

WHMI S Symbols: Other Toxic Effects  
Formaldehyde

CAS Number: 50-00-0  
Chemical Formula: CH<sub>2</sub>O  
GHS Classification: Flam. Liq. 4, H227; Acute Tox. 3-Oral, H301; Acute Tox. 3-Derm, H311; Skin Corr. 1B, H314; Skin Sens. 1, H317; Acute Tox. 3-Inh, H331; Resp. Sens. 1, H334; Muta. 2, H341; Carc. 2, H351; Repr. 2, H361; S-TOT Single 1, H370; Aquatic Acute 2, H401  
Percent Range (Trade Secret): < 0.1  
Percent Range Units: weight / weight  
PEL: 0.75 ppm  
TLV: 0.3 ppm

WHMI S Symbols: Acute PoisonOther Toxic Effects  
Methyl Alcohol

CAS Number: 67-56-1  
Chemical Formula: CH<sub>3</sub>OH  
GHS Classification: Flam. Liq. 2, H225; Acute Tox. 3-Oral, H301; Acute Tox. 3-Derm, H311; Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Acute Tox. 3-Inh, H331; Muta. 2, H341; Repr. 2, H361; S-TOT SE1, H370  
Percent Range (Trade Secret): < 0.1  
Percent Range Units: weight / weight  
PEL: 200 ppm  
TLV: 200 ppm

WHMI S Symbols: Acute PoisonFlammable / CombustibleOther Toxic Effects  
Sodium Bicarbonate

CAS Number: 144-55-8  
Chemical Formula: NaHCO<sub>3</sub>  
GHS Classification: Acute Tox. 5-Oral, H303; Skin Irrit. 3, H316  
Percent Range (Trade Secret): < 0.1  
Percent Range Units: weight / weight  
PEL: 15 mg/m<sup>3</sup> as inhalable dust; 5 mg/m<sup>3</sup> as respirable dust  
TLV: 10 mg/m<sup>3</sup> as inhalable dust; 3 mg/m<sup>3</sup> as respirable dust

WHMI S Symbols: Not applicable  
Hazardous Components according to GHS: No  
Demineralized Water

CAS Number: 7732-18-5  
Chemical Formula: H<sub>2</sub>O  
GHS Classification: Not a dangerous substance according to GHS.  
Percent Range (Trade Secret): > 99.0  
Percent Range Units: weight / volume  
PEL: Not established  
TLV: Not established

WHMI S Symbols: Not applicable

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#### 4. FIRST AID MEASURES

General Information: Not applicable  
Advice to doctor: Treat symptomatically.  
Eye Contact: Immediately flush eyes with water for 15 minutes. Call physician.  
Skin Contact (First Aid): Wash skin with plenty of water. Call physician if irritation develops.  
Inhalation: None required.  
Ingestion (First Aid): Give large quantities of water. Call physician immediately.

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## 5 . FIRE FIGHTING MEASURES

Flammable Properties: Material will not burn.  
Fire Fighting Instruction: Acts in any fire, wear self-contained breathing apparatus pressure-demand and full protective gear.  
Ex tinguishing Media: Use media appropriate to surrounding fire conditions  
Ex tinguishing Media NO T T o B e Used: Not applicable  
Fire / Ex plosion Hazards: None reported  
Hazardous Combustion Products: None

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## 6 . ACCIDENTAL RELEASE MEASURES

Spill Response Notice:  
Only persons properly qualified to respond to an emergency involving hazardous substances may respond to a spill according to federal regulations (OSHA 29 CFR 1910.120 (a)(v)) and per your company's emergency response plan and guidelines/procedures. See Section 13, Special Instructions for disposal assistance.  
Containment Technique: Stop spilled material from being released to the environment.  
Clean-up Technique: Cover spilled material with a dry acid, such as citric or boric. Scoop up slurry into a large beaker. Adjust to a pH between 6 and 9 with an acid, such as sulfuric or citric. Flush reacted material to the drain with a large excess of water.  
Evacuation Procedure: Evacuate as needed to perform spill clean-up. If conditions warrant, increase the size of the evacuation.  
DOT Emergency Response Guide Number: Not applicable

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## 7. HANDLING AND STORAGE

Handling: Avoid contact with eyes Wash thoroughly after handling. Maintain general industrial hygiene practices when using this product.  
Storage: Store between 10 ° and 25 °C. Keep container tightly closed when not in use.  
Flammability Class: Not applicable

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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Maintain general industrial hygiene practices when using this product.  
Personal Protective Equipment:  
Eye Protection: safety glasses with top and side shields  
Skin Protection: disposable latex gloves lab coat  
Inhalation Protection: adequate ventilation  
Precautionary Measures: Avoid contact with: eyes Wash thoroughly after handling.  
TLV : Not established  
PEL: Not established  
For Occupational Exposure Limits (OEL) for ingredients, see section 3 - Composition/Information on Ingredients.:

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear, colorless liquid  
Physical State: Liquid  
Molecular Weight: Not applicable  
Odor: None  
Odor Threshold: Odorless  
pH: 10.0  
Metal Corrosivity:  
Corrosivity Classification: Not classified as corrosive to metals according to GHS criteria.  
Steel: 0.000 in/yr  
Aluminum: 0.014 in/yr

Specific Gravity/ Relative Density (water = 1; air = 1): 0.990

Viscosity:  $1 \times 10^{-2}$  m/s

Solubility:

Water: Miscible

Acid: Miscible

Other: Not determined

Partition Coefficient (n-octanol / water): Not applicable

Coefficient of Water / Oil: Not applicable

Melting Point: Not determined

Decomposition Temperature: Not determined

Boiling Point: 100 °C

Vapor Pressure: Not determined

Vapor Density (air = 1): Not determined

Evaporation Rate (water = 1): 0.76

Volatile Organic Compounds Content: Not applicable

Flammable Properties: Material will not burn.

Flash Point: Not applicable

Method: Not applicable

Flammability Limits:

Lower Explosion Limits: Not applicable

Upper Explosion Limits: Not applicable

Autoignition Temperature: Not applicable

Explosive Properties:

Not classified according to GHS criteria.

Oxidizing Properties:

Not classified according to GHS criteria.

Reactivity Properties:

Not classified as self-reactive, pyrophoric, self-heating or emitting flammable gases in contact with water according to GHS criteria.

Gas under Pressure:

Not classified according to GHS criteria.

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## 10. STABILITY AND REACTIVITY

Chemical Stability: Stable when stored under proper conditions.

Mechanical Impact: None reported

Static Discharge: None reported.

Reactivity / Incompatibility: None reported

Hazardous Decomposition: None reported

Conditions to Avoid: Heat Evaporation

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## 11. TOXICOLOGICAL INFORMATION

Toxicokinetics, Metabolism and Distribution: No health effects are anticipated in normal use.

Toxicologically Synergistic Products: None reported

Acute Toxicity: Based on classification principles, the classification criteria are not met. Acute Toxicity Estimate (ATE)

- Calculated from Ingredient Toxicity Data

ATE Oral Rat LD50 = 215717 mg/kg

ATE Inhalation Rat LC50 = 508 mg/l

Specific Target Organ Toxicity - Single Exposure (STOT-SE): Based on classification principles, the classification criteria are not met.

Specific Target Organ Toxicity - Repeat Exposure (STOT-RE): Based on classification principles, the classification criteria are not met.

Skin Corrosion/Irritation: Based on classification principles, the classification criteria are not met.

Eye Damage: Based on classification principles, the classification criteria are not met.

Sensitization: Based on classification principles, the classification criteria are not met.

CMR Effects/Properties (carcinogenic, mutagenic or toxic to reproduction): Data insufficient for classification

This product does NOT contain any IARC listed chemicals.

This product does NOT contain any NTP listed chemicals.  
This product does NOT contain any OSHA listed carcinogens.

Symptoms/Effects:

Ingestion: None reported  
Inhalation: No effects anticipated  
Skin Absorption: No effects anticipated  
Chronic Effects: None reported  
Medical Conditions Aggravated: None reported

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## 12. ECOLOGICAL INFORMATION

Product Ecological Information: --

No ecological data available for this product.

Ingredient Ecological Information: Sodium Carbonate: 96h LC50 = 7100 mg/L ; 48 h Daphnia magna EC50 = 4100 mg/L ; Sodium bicarbonate: LC50 = 3000 mg/L ; Daphnia magna 48 h EC50 = 265 mg/L

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## 13. DISPOSAL CONSIDERATIONS

EPA Waste ID Number: Not applicable

Special Instructions (Disposal): Adjust to a pH between 6 and 9 with an acid, such as sulfuric or citric. Open cold water tap completely, slowly pour the reacted material to the drain.

Empty Containers: Rinse three times with an appropriate solvent. Dispose of empty container as normal trash.

NOTICE (Disposal): These disposal guidelines are based on federal regulations and may be superseded by more stringent state or local requirements. Please consult your local environmental regulators for more information. In Europe:

Chemical and analysis solutions must be disposed of in compliance with the respective national regulations. Product packaging must be disposed of in compliance with the country-specific regulations or must be passed to a packaging return system.

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## 14. TRANSPORT INFORMATION

D.O.T.:

D.O.T. Proper Shipping Name: Not Currently Regulated

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Hazard Class: NA  
Subsidiary Risk: NA  
ID Number: NA  
Packaging Group: NA

T.D.G.:

Proper Shipping Name: Not Currently Regulated

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Hazard Class: NA  
Subsidiary Risk: NA  
UN Number/PI N: NA  
Packaging Group: NA

I.C.A.O.:

I.C.A.O. Proper Shipping Name: Not Currently Regulated

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Hazard Class: NA  
Subsidiary Risk: NA  
ID Number: NA  
Packaging Group: NA

I.M.O.:

Proper Shipping Name: Not Currently Regulated

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Hazard Class: NA  
Subsidiary Risk: NA

ID Number: NA  
Pack ing Group: NA  
Marine Pollutant:

Additional Information: There is a possibility that this product could be contained in a reagent set or kit composed of various compatible dangerous goods. If the item is NOT in a set or kit, the classification given above applies. If the item IS part of a set or kit, the classification would change to the following: UN3316 Chemical Kit, Class 9, PG II or III. If the item is not regulated, the Chemical Kit classification does not apply.

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## 15 . REGULATORY INFORMATION

### U.S. Federal Regulations:

O.S.H.A.: This product meets the criteria for a hazardous substance as defined in the Hazard Communication Standard. (29 CFR 1910.1200)

### E.P.A.:

S.A.R.A. Title III Section 311/312 Categorization (40 CFR 370): Immediate (Acute) Health Hazard

S.A.R.A. Title III Section 313 (40 CFR 372): This product does NOT contain any chemical subject to the reporting requirements of Section 313 of Title III of S A R A .

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302 (EHS) TPQ (40 CFR 355): Not applicable

304 CERCLA RQ (40 CFR 302.4): Not applicable

304 EHS RQ (40 CFR 355): Not applicable

Clean Water Act (40 CFR 116.4): Not applicable

RCRA: Contains no RCRA regulated substances.

### State Regulations:

California Prop. 65: No Prop. 65 listed chemicals are present in this product.

Identification of Prop. 65 Ingredient(s): None

California Perchlorate Rule CCR Title 22 Chap 33: Not applicable

Trade Secret Registry: Not applicable

### National Inventories:

U.S. Inventory Status: All ingredients in this product are listed on the TSCA 8(b) Inventory (40 CFR 710).

CAS Number: Not applicable

Canadian Inventory Status: All ingredients of this product are D S L L listed.

EEC Inventory Status: All ingredients used to make this product are listed on EINECS / EL INCS .

Australian Inventory (AICS) Status: All ingredients are listed.

New Zealand Inventory (NZIO) Status: Not determined

Korean Inventory (KECI) Status: All components of this product are either listed, listed as the anhydrous compound or exempt.

Japan (ENCS) Inventory Status: All components either listed or exempt.

China (PRC) Inventory (MEP) Status: All components either listed or exempt.

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## 16 . OTHER INFORMATION

References: 29 CFR 1900 - 1910 (Code of Federal Regulations - Labor). Air Contaminants, Federal Register, Vol. 54,

No. 12. Thursday, January 19, 1989. pp. 2332-2983. TLV's Threshold Limit Values and Biological Exposure Indices for 1992-1993. American Conference of Governmental Industrial Hygienists, 1992. Technical Judgment. In-house information.

Complete Text of H phrases referred to in Section 3: Not applicable

Revision Summary: Substantial revision to comply with EU Reg 1272/2008, Reg 1907/2006 and UN GHS (S T/S G/A C.10 /36/Add.3).

Date of MSDS Preparation:

Day: 20

Month: February

Year: 2015

MSDS Prepared: MSDS prepared by Product Compliance Department extension 3350

CCOHS Evaluation Note: It is offered under exemption from WHMIS labeling as specified in the Controlled Products Regulation (CPR) Section 17. It is offered under the interim policy that was established by Health Canada permitting use of GHS -formatted safety data sheets in Canada prior to revision of CPR to GHS. This product has been classified and

labeled in accordance with the requirements of GHS (S T/S G/A C.10 /36/A dd.3). This S D S has been prepared in accordance with the requirements of GHS (S T/S G/A C.10 /36/A dd.3).

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Legend:

NA - Not A pplicable	w /w - w eight/w eight
ND - Not D etermined	w /v - w eight/v olume
NV - Not A v ailable	v /v - v olume/v olume

**USER RESPONSIBILITY:** Each user should read and understand this information and incorporate it in individual site safety programs in accordance with applicable hazard communication standards and regulations.

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED TO BE ACCURATE.  
HOW EVER, NO W ARRANTY IS EX PRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA  
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