PH-1 Na Amino Acid Buffer

Safety Data Sheet

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

Date of issue: 11/15/2018 Version: 2

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture

Product name : PH-1 Na Amino Acid Buffer

Product code : ANO-5041

Other means of identification : PH-1 Buffer for L-8800(A)\L-8900

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

Use of the substance/mixture : Buffer

1.3. Details of the supplier of the safety data sheet

ADS Biotec Inc.
7409 Irvington Road
Omaha, NE 68122 - USA
support@adsbiotec.com

1.4. Emergency telephone number

Emergency Contact Number : USA: 1-800-255-3924 (CHEMTEL 24hr); International: +1-813-248-0585 (CHEMTEL 24hr)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Flam. Liq. 3 H226

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :

GHS02

Signal word (GHS-US) : Warning

Hazard statements (GHS-US) : H226 - Flammable liquid and vapour

Precautionary statements (GHS-US) : P210 - Keep away from heat, sparks, open flames, hot surfaces. - No smoking
P233 - Keep container tightly closed
P240 - Ground/bond container and receiving equipment
P241 - Use explosion-proof electrical, lighting, ventilating equipment
P242 - Use only non-sparking tools
P243 - Take precautionary measures against static discharge
P280 - Wear protective gloves, protective clothing, eye protection, face protection
P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P403+P235 - Store in a well-ventilated place. Keep cool

2.3. Other hazards

Other hazards not contributing to the classification : May cause eye irritation. Repeated or prolonged contact may cause skin irritation. May cause irritation to the respiratory tract.

2.4. Unknown acute toxicity (GHS-US)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

Full text of H-phrases: see section 16

3.2. Mixture

Name	Product identifier	%	GHS-US classification
Ethanol	(CAS No) 64-17-5	10 - 20	Flam. Liq. 2, H225
Citric Acid	(CAS No) 77-92-9	1 - 5	Eye Irrit. 2A, H319

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : Remove to fresh air, keep the patient warm and at rest. If symptoms develop obtain medical attention.

First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. If symptoms develop obtain medical attention.

First-aid measures after eye contact : Rinse immediately with plenty of water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If symptoms develop obtain medical attention.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Give 100 - 200 ml of water to drink. If symptoms develop obtain medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries : Not expected to present a significant hazard under anticipated conditions of normal use.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Flammable liquid and vapour.

Explosion hazard : On exposure to high temperature, may decompose, releasing explosive vapours. May form flammable/explosive vapour-air mixture.

Reactivity : Stable under normal conditions.

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Avoid fire-fighting water enteing the environment.

Protection during firefighting : Fire fighters should wear complete protective clothing including self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Avoid contact with eyes, skin and clothing.

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Wear suitable protective clothing and eye or face protection.

Emergency procedures : Remove ignition sources. Avoid contact with eyes, skin and clothing. Ensure adequate ventilation.

6.2. Environmental precautions

Avoid release to the environment. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Use non-sparking tools. Wash spill area with soapy water.

6.4. Reference to other sections

SECTION 8: Exposure controls/personal protection. SECTION 13: Disposal considerations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed	:	Handle empty containers with care because residual vapours are flammable.
Precautions for safe handling	:	Keep away from open flames, hot surfaces and sources of ignition. Avoid contact with skin, eyes and clothing. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. No naked lights. No smoking. Take precautionary measures against static discharge. Use only non-sparking tools.
Hygiene measures	:	Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures	:	Proper grounding procedures to avoid static electricity should be followed.
Storage conditions	:	Keep only in the original container in a cool well ventilated place. Keep container tightly closed.
Incompatible products	:	Acids. Strong bases. Metals. Oxidizing agent. Reducing agents. combustible materials.
Incompatible products	:	Sources of ignition. Direct sunlight.

7.3. Specific end use(s)

A buffer used for amino acid analysis by HPLC in a professional diagnostic or research laboratory.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Ethanol (64-17-5)		
USA OSHA	OSHA PEL (TWA) (mg/m³)	1900 mg/m³
USA OSHA	OSHA PEL (TWA) (ppm)	1000 ppm

8.2. Exposure controls

Appropriate engineering controls	:	Ensure adequate ventilation.
Personal protective equipment	:	Avoid all unnecessary exposure.
Hand protection	:	Wear chemically resistant protective gloves.
Eye protection	:	Chemical goggles or safety glasses.
Respiratory protection	:	In case of inadequate ventilation: Use an approved air purifying respirator to control exposure. Follow respirator protection requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use.
Thermal hazard protection	:	Not required for normal conditions of use.
Environmental exposure controls	:	Not normally required.
Other information	:	Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Appearance	:	Clear.
Colour	:	Colourless.
Odour	:	characteristic.
Odour threshold	:	No data available
pH	:	3.1
Relative evaporation rate (butylacetate=1)	:	No data available
Melting point	:	-114 °C -173 ˚F
Freezing point	:	No data available
Boiling point	:	79 °C 174 ˚F
Flash point	:	44 °C 111 ˚F
Self ignition temperature	:	> 363 °C >685 ˚F
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	No data available
Vapour pressure	:	44.6 mm Hg @ 20 °C (68 ˚F)
Relative vapour density at 20 °C	:	1.6

Physical state	:	Liquid
Relative density	:	1
Solubility	:	Miscible with water.
Log Pow	:	No data available
Log Kow	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available
Explosive properties	:	No data available
Oxidising properties	:	No data available
Explosive limits	:	3.3 - 19 vol %

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Flammable liquid and vapour.

10.4. Conditions to avoid

Extremely high or low temperatures. Direct sunlight. Open flame. Overheating. Heat. Sparks.

10.5. Incompatible materials

Acids. metals. Strong bases. Oxidizing agents. Reducing agents. Strong acids.

10.6. Hazardous decomposition products

Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Citric acid (77-92-9)	
LD50 oral rat	3 g/kg

Ethanol (64-17-5)	
LD50 oral rat	7060 mg/kg
LC50 inhalation rat (ppm)	20000 ppm 10 H

Skin corrosion/irritation	:	Not classified pH: 3.1
Serious eye damage/irritation	:	Not classified pH: 3.1
Respiratory or skin sensitisation	:	Not classified
Germ cell mutagenicity	:	Not classified Based on available data, the classification criteria are not met
Carcinogenicity	:	Not classified
Reproductive toxicity	:	Not classified Based on available data, the classification criteria are not met
Specific target organ toxicity (single exposure)	:	Not classified
Specific target organ toxicity (repeated exposure)	:	Not classified Based on available data, the classification criteria are not met

Aspiration hazard	:	Not classified Based on available data, the classification criteria are not met
Potential Adverse human health effects and symptoms	:	Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Not classified.

12.2. Persistence and degradability

PH-1 (L-8800 (A) AAA Buffer 1)	
Persistence and degradability	No information available.

12.3. Bioaccumulative potential

PH-1 (L-8800 (A) AAA Buffer 1)	
Bioaccumulative potential	No information available.

12.4. Mobility in soil

PH-1 (L-8800 (A) AAA Buffer 1)	
Ecology - soil	No information available.

12.5. Other adverse effects

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations	:	Empty containers should be taken to an approved waste handling site for recycling or disposal. Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to ...
Additional information	:	Handle empty containers with care because residual vapours are flammable.
Ecology - waste materials	:	Avoid release to the environment.

SECTION 14: Transport information

In accordance with DOT

UN-No.(DOT)	:	1993
DOT Proper Shipping Name	:	Flammable liquids, n.o.s. Ethanol
Department of Transportation (DOT) Hazard Classes	:	3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120
Hazard labels (DOT)	:	3 - Flammable liquid

DOT Symbols	:	G - Identifies PSN requiring a technical name
Packing group (DOT)	:	III - Minor Danger
DOT Packaging Exceptions (49 CFR 173.xxx)	:	150
DOT Packaging Non Bulk (49 CFR 173.xxx)	:	203
DOT Packaging Bulk (49 CFR 173.xxx)	:	242
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	:	60 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	:	220 L
DOT Vessel Stowage Location	:	A - The material may be stowed ‘‘on deck’’ or ‘‘under deck’’ on a cargo vessel and on a passenger vessel.

Additional information

Other information : Not classified.

Special transport precautions : No special precautions required.

Transport by sea

UN-No. (IMDG) : 1993
Proper Shipping Name (IMDG) : FLAMMABLE LIQUID, N.O.S.
Class (IMDG) : 3 - Flammable liquids
Packing group (IMDG) : III - substances presenting low danger

Air transport

UN-No.(IATA) : 1993
Proper Shipping Name (IATA) : FLAMMABLE LIQUID, N.O.S.
Class (IATA) : 3 - Flammable Liquids
Packing group (IATA) : III - Minor Danger

SECTION 15: Regulatory information

15.1. US Federal regulations

Citric acid (77-92-9)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Ethanol (64-17-5)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

PH-1 (L-8800 (A) AAA Buffer 1)	
WHMIS Classification	Class B Division 2 - Flammable Liquid Class D Division 2 Subdivision B - Toxic material causing other toxic effects

15.2.2. National regulations

Ethanol (64-17-5)
Listed on IARC (International Agency for Research on Cancer)

15.3. US State regulations

Ethanol (64-17-5)
U.S. - New Jersey - Right to Know Hazardous Substance List

SECTION 16: Other information

Abbreviations and acronyms : ADR (Accord européen relatif au transport international des marchandises Dangereuses par Route). CAS (Chemical Abstracts Service) number. IARC (International Agency for Research on Cancer). IATA (International Air Transport Association). IMDG (International Maritime Dangerous Goods Code). RID (Règlement concernant le transport international ferroviaire de marchandises).

Other information : None.

Full text of H-phrases: see section 16:

Eye Irrit. 2A	Serious eye damage/eye irritation, Category 2A
Flam. Liq. 2	Flammable liquids, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
H225	Highly flammable liquid and vapour
H226	Flammable liquid and vapour
H319	Causes serious eye irritation

NCEC SDS US GHS (Hazcom 2012)

The information and recommendations contained herein are based upon data believed to be up-to-date and correct. However, no guarantee or warranty of any kind, express or implied, is made with respect to the information and recommendations contained herein. We accept no responsibility and disclaim all liability for any harmful effects that may be caused by (incorrect) use, handling, purchase, resale, or exposure to our product. Customers and users of our product must comply with all applicable health and safety laws, regulations, and orders. In particular, they are under an obligation to carry out a risk assessment for the particular work places and to take adequate risk management measures in accordance with the national implementation legislation of EU Directives 89/391 and 98/24.