

1. IDENTIFICATION**Product Identifier**

Product Name pH 12.45 Buffer, Clear
Product Number(s) AI1123
Pure Substance/mixture Mixture

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

Recommended Use Use as laboratory reagent
Uses advised against No information available

Supplier: Apera Instruments, LLC

Address: 6656 Busch Blvd, Columbus,
Ohio 43229, U.S.A
Tel: 1-614-285-3080

E-mail address info@aperainst.com

Made In USA

Emergency Telephone 1-614-285-3080
9:00 am – 6:00 pm EST

2. HAZARDS IDENTIFICATION**Classification**

Classification - Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [GHS]

Classification according to EU Directives 67/548/EEC or 1999/45/EC.

Label Elements**Emergency Overview**

The product contains no substances which at their given concentration, are considered hazardous to health.

Appearance Clear

Physical State Liquid

Odor None

EUH210 - Safety data sheet available upon request.

Precautionary Statements

P202 - Do not handle until all safety information has been read and understood.

Hazards not otherwise classified (HNOC)

No information available

Other Information

No information available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No	Weight %	Trade Secret
Water	7732-18-5	>99 %	*
Potassium chloride	7447-40-7	<0.5 %	*
Sodium hydroxide	1310-73-2	<0.5 %	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURESFirst Aid Measures

General Advice	Use first aid treatment according to the nature of the injury. For further assistance, contact your local Poison Control Center. Show this safety data sheet to the doctor in attendance.
Eye Contact	In case of eye contact, remove contact lens and rinse thoroughly with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.
Skin Contact	Wash off immediately with soap and plenty of water while removing all contaminated clothing and shoes. If skin reactions occur, contact a physician.
Inhalation	Move to fresh air. If breathing is difficult, give oxygen. If symptoms persist, obtain medical attention.
Ingestion	Clean mouth with water and drink afterwards plenty of water. Do not include vomiting. Call a physician or Poison Control Center immediately.
Production of First-Aiders	Use personal protective equipment. See Section 8 for more detail. Do not use mouth to mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical devices.

Most important symptoms and effects, both acute and delayed

Most important symptoms/effects No information available

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically

5. FIRE-FIGHTING MEASURESSuitable Extinguishing Media

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

Unsuitable Extinguishing Media

No information available

Specific Hazards Arising from the Chemical

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

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURESPersonal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions Use personal protective equipment. Refer to Section 8. Evacuate personnel to safe areas.

Environmental Precautions	Beware of vapors accumulating to form explosives concentrations. Vapors can accumulate in low areas.
<u>Method and Material for Containment and Cleaning Up</u>	
Methods for Containment	Prevent further leakage or spillage if safe to do so.
Methods for Cleaning Up	Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Handling	To avoid risks to human health and the environment, comply with the instructions for use. Wear personal protective equipment. Avoid breathing dust/fume/gas/mist/vapors/spray. Ensure adequate ventilation, especially in confined areas.
----------	---

Hygiene Considerations	Handle in accordance with good industrial hygiene and safety practice.
------------------------	--

Conditions for Safe Storage, Including any Incompatibilities

Storage	Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Keep away from direct sunlight.
---------	---

Incompatible Products	No information available.
-----------------------	---------------------------

Specific end use(s)

Specific use	Laboratory reagent
--------------	--------------------

Risk Management Methods (RMM)	The information required is contained in this Safety Data Sheet.
-------------------------------	--

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

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

Appropriate Engineering Controls

Engineering Measures	Showers Eyewash stations Ventilation systems
----------------------	--

Individual protection measures, such as personal protective equipment

Eye/face Protection	Wear chemical splash goggles. If splashes are likely to occur, wear: Face-shield.
---------------------	---

Skin and Body Protection	Wear protection gloves/clothing
--------------------------	---------------------------------

Respiratory Protection	None required under normal usage. In case of inadequate ventilation wear respiratory protection.
------------------------	--

Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice.
------------------	--

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties.

Physical State	Liquid
Appearance	Light green
Odor	None
Odor Threshold	No information available
pH Range	9.5 - 13.5

<u>Property</u>	<u>Values</u>	<u>Remarks * Method</u>
Melting point/freezing point	No information available	

Boiling Point/Range	~ 100 °C / 212 °F
Flash Point (High in °C)	No information available
Evaporation Rate	No information available
Flammability (solid, gas)	No information available
Flammability Limit in Air	
Upper flammability limit:	No information available
Lower flammability limit:	No information available
Vapor pressure	No information available
Vapor Density	No information available
Specific Gravity	No information available
Water Solubility	soluble
Solubility in other solvents	No information available
Partition coefficient	No information available
Autoignition Temperature	
Decomposition Temperature	No information available
Kinematic Viscosity	No information available
Dynamic Viscosity	No information available
Explosive Properties	No information available
Oxidizing Properties	No information available

Other Information

Softening Point	No information available
Molecular Weight	No information available
VOC Content (%)	No information available
Density	No information available
Bulk Density	No information available

10. STABILITY AND REACTIVITY**Reactivity**

No information available

Chemical Stability

Stable under normal conditions

Possibility of Hazardous Reactions

None under normal processing

Conditions to Avoid

Extremes of temperature and direct sunlight

Incompatible Materials

No information available

Hazardous Decomposition Products

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

11. TOXICOLOGICAL INFORMATION**Information on likely routes of exposure**

Inhalation	No information available
Eye Contact	No information available
Skin Contact	No information available
Ingestion	No information available

Information on Toxicological Effects

Symptoms No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No information available
Mutagenic Effects No information available
Carcinogenicity No information available
Reproductive Effects No information available
STOT – single exposure No information available
STOT – repeated exposure No information available
Aspiration hazard No information available

12. ECOLOGICAL INFORMATION**Ecotoxicity**

Contains a substance which causes risk of hazardous effects to the environment.

Persistence and Degradability

This product is 100% inorganic and will not biodegrade

Bioaccumulation/Accumulation

No information available

Mobility

No information available

Results of PBT and vPvB assessment

No information available

Other adverse effects

No information available

Endocrine Disruptor Information

No information available

13. DISPOSAL CONSIDERATIONS**Waste Treatment Methods**

Waste Disposal Methods Disposal should be in accordance with applicable regional, national and local laws and regulations. Do not discharge to sewer.

Local disposal regulations Not available.

Hazardous waste code Not regulated.

Contaminated Packaging Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. TRANSPORT INFORMATION

DOT Not regulated
TDG Not regulated
MEX Not regulated
ICAO Not regulated
IATA Not regulated
IMDG/IMO Not regulated
RID Not regulated
ADR Not regulated
ADN Not regulated

15. REGULATORY INFORMATION**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.

International Inventories

USINV	Component listed
CANINV	Component listed
EINECS/ELINCS	Component listed
IECSC	Component listed
AICS	Component listed

USINV/TSCA – United States Toxic Substances Control Act Section 8(b) Inventory

CANINV/DSL/NDSL – Canadian Domestic Substances List/Non-Domestic Substance List

EINECS/ELINCS – European Inventory of Existing Commercial Chemical Substance / EU List of Notified Chemical Substances

IECSC – Chinese Inventory of Existing Chemical Substances

AICS – Australian Inventory of Chemical Substances

U.S. Federal Regulations

This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazardous Communication Standard, 29 CFR 1910.1200.

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does contains a chemical which are subject to the reporting requirements of the Act and Title 40n of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazardous Categorization

Acute Health Hazard	No
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This material, as supplied, does contains a component regulated as a hazardous substance under the Clean Water Act (Section 112(r) (40 CFR 68.130).

CERCLA

This material, as supplied, does contains a component regulated as hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302.4) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional or state level pertaining to releases of this material.

U.S. State Regulations**California Proposition 65**

This product is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

State Right-to-Know

Massachusetts Right-to-Know Act – Substance List	Not regulated
New Jersey Worker and Community Right-to-Know Act	Not regulated
Pennsylvania Right-to-Know Act – Hazardous Substance	Not regulated
Rhode Island Right-to-Know Act	Not regulated

U.S. EPA Label Information

No information available

16. OTHER INFORMATION

Revision Date: 01-October-2023

Disclaimer:

IMPORTANT: The information contained in this SDS is correct to the best of our knowledge as of the issue date (or subsequent revision date, if any), and is to be used only as a guide. This SDS does not constitute a guarantee (express or implied) of any kind and we make no warranties of any kind as to the accuracy or completeness of the information contained herein or the merchantability or fitness of the product or this information for a particular purpose. It is the responsibility of each individual buyer/user to determine the suitability of this information and the product for its intended purposes. Product sales are subject to Apera Instruments standard terms and conditions of sale. This information relates only to the designated product as shipped and may not be valid if the product is used in combination with any other materials or is not used in accordance with our instructions, or is altered in any way. It is the responsibility of the buyer/user to ensure that its activities comply with all applicable government requirements. Since conditions of use of the product are not under direct control of Apera Instruments, it is the duty of the buyer/user to determine the necessary conditions for the safe use of the product. Apera Instruments will not be liable for any injuries or damages resulting from handling, use, misuse or contact with the product.