Dilution Buffer PN 1209

Safety Data Sheet

SECTION 1: IDENTIFICATION

Product Name: Dilution Buffer
Product Form: Mixture
Product Code: PN 1209
Intended Use of the Product: For Laboratory Use
Manufacturer:
Eiger Diagnostics Inc.
2451 S. Buffalo Drive, Suite 112
Las Vegas, NV 89117 USA
Telephone: (725) 208-0223
Emergency: (725) 208-0223 – During Business Hours 9:00 am to 5:00 pm

SECTION 2: HAZARDS IDENTIFICATION

GHS-US Classification

Acute Tox 4 (Oral)	H302
Acute Tox 4 (Dermal)	H312
STOT RE 2	H373
Aquatic Acute 3	H402
Aquatic Chronic 3	H412

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

GHS Label Elements (Note: per 29 CFR 1910.1200(b)(5)(iii), pictograms are not required on product labeling)
Pictogram:

Signal Word: Warning

Hazard Statements:
H302+H312 - Harmful if swallowed or in contact with skin
H373 - May cause damage to organs through prolonged or repeated exposure
H402 - Harmful to aquatic life
H412 - Harmful to aquatic life with long lasting effects

Precautionary Statements:
P260 - Do not breathe vapors, mist, or spray
P264 - Wash hands, forearms, and other exposed areas thoroughly after handling
P270 - Do not eat, drink, or smoke when using this product
P273 - Avoid release to the environment
P280 - Wear protective gloves, protective clothing, and eye protection
P301+P312 - If swallowed: Call a poison center or doctor if you feel unwell
P302+P352 - If on skin: Wash with plenty of water
P312 - Call a poison center or doctor if you feel unwell
P314 - Get medical advice/attention if you feel unwell

P321 - Specific treatment (see section 4 on this SDS)
P330 - Rinse mouth
P362+P364 - Take off contaminated clothing and wash it before reuse
P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations

Other Hazards: Exposure may aggravate pre-existing eye, skin or respiratory conditions.
Unknown Acute Toxicity: No Data Available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixture
Hazardous Components:

Name	CAS No	% Composition
Thimerosal	54-64-8	0.2

SECTION 4: 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).
Inhalation: When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.
Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Get immediate medical advice/attention if irritation develops and persists.
Eye Contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention if irritation develops and persists.
Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

Most Important symptoms and effects, both acute and delayed: See sections 2 and/or 11

Indication of Any Immediate Medical Attention and Special Treatment Needed: No additional information available.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media
Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire.

Special Hazards Arising from the Mixture
Fire Hazard: Not considered flammable but may burn at high temperatures.
Explosion Hazard: Product is not explosive.
Reactivity: Hazardous reactions will not occur under normal conditions.

Advice for Firefighters
Precautionary Measures: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Use water spray or fog for cooling exposed containers.

Protection During Firefighting: Do not enter area without proper protective equipment, including respiratory protection.

Other Information: Do not allow run-off from firefighting to enter drains or water courses.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

General Measures: Do not get in eyes, on skin or on clothing. Do not breathe vapor, mist or spray.

For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

For Emergency Responders

Protective Equipment: Equip cleanup crew with proper protection

Emergency Procedures: Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

Environmental Precautions

Prevent entry to sewers and public waters. Avoid release to the environment

Methods and Material for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

Reference to Other Sections

See Section 8, Exposure Controls and Personal Protection. See Section 13, Disposal Considerations.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not breathe vapors, mist, or spray. Do not get in eyes, on skin, or on clothing. Handle empty containers with care because they may still present a hazard.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures.

Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Storage Conditions: Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

Incompatible Products: Strong acids, strong bases, strong oxidizers. Reducing agents.

Specific End Use(s): No additional information available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Mercury (7439-97-6)		
USA ACGIH	ACGIH TWA (mg/m³)	0.025 mg/m³
USA ACGIH	ACGIH chemical category	Skin - potential significant contribution to overall exposure by the cutaneous route, Not Classifiable as a Human Carcinogen
USA ACGIH	Biological Exposure Indices	20 µg/g Kreatinin (Medium: urine - Time: prior to shift - Parameter:
USA NIOSH	NIOSH REL (TWA) (mg/m³)	0.05 mg/m³ (vapor)
USA NIOSH	NIOSH REL (ceiling) (mg/m³)	0.1 mg/m³
USA IDLH	US IDLH (mg/m³)	10 mg/m³
USA OSHA	OSHA PEL (Ceiling) (mg/m³)	0.1 mg/m³

Exposure Controls

Appropriate Engineering Controls: Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

Personal Protective Equipment: Gloves. Protective clothing. Protective glasses or goggles.

Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear protective gloves.

Eye Protection: Chemical goggles or safety glasses.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

Other Information: When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State: Liquid

Appearance: Clear colorless

Odor: No data available

Odor Threshold: No data available

pH: ≈ 7.0

Evaporation Rate: No data available

Melting/Freezing Point: ≈ 0 °C (32 °F)

Boiling Point: ≥ 100 °C (212 °F)

Flash Point: No data available

Auto-ignition Temperature: No data available

Decomposition Temperature:	No data available
Flammability (solid, gas):	No data available
Vapor Pressure:	No data available
Relative Vapor Density at 20 °C:	No data available
Relative Density:	No data available
Specific Gravity:	≈ 1
Solubility:	Complete in water
Partition Coefficient: N-Octanol/Water:	No data available
Viscosity:	No data available
Other Information:	No additional information available.

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Hazardous reactions will not occur under normal conditions.

Chemical Stability: Stable under recommended handling and storage conditions (see section 7)

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Conditions to Avoid: Direct sunlight, extremely high or low temperatures, and incompatible materials.

Incompatible Materials: Strong acids, strong bases, strong oxidizers. Reducing agents.

Hazardous Decomposition Products: Thermal decomposition generates: Carbon oxides (CO, CO_2). Sulfur oxides. Nitrogen oxides.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects

Acute Toxicity: Oral: Harmful if swallowed. Dermal: Harmful in contact with skin

Thimerosal (54-64-8)	
LD50 Oral Rat	75 mg/kg
ATE (Dermal)	5.00 mg/kg body weight
ATE (Dust/Mist)	0.05 mg/l/4h

Skin Corrosion/Irritation: Not classified (**pH:** ≈ 7.0)

Serious Eye Damage/Irritation: Not classified (**pH:** ≈ 7.0)

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Carcinogenicity: Not classified

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Specific Target Organ Toxicity (Repeated Exposure): May cause damage to organs through prolonged or repeated exposure.

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Prolonged exposure may cause irritation.

Symptoms/Injuries After Skin Contact: This material is harmful through skin contact, and can cause adverse health effects or death in significant amounts. This material may be absorbed through the skin and eyes.

Symptoms/Injuries After Eye Contact: May cause eye irritation.
Symptoms/Injuries After Ingestion: This material is harmful orally and can cause adverse health effects or death in significant amounts.
Chronic Symptoms: May cause damage to organs through prolonged or repeated exposure. Chronic inhalation of Mercury can cause anorexia, tremor, renal damage, chemical pneumonia, headache, neurological symptoms, etc.

SECTION 12: ECOLOGICAL INFORMATION

Toxicity
Ecology-General: Harmful to aquatic life with long-lasting effects.
Persistence and Degradability: May cause long-term adverse effects to the environment.
Bioaccumulative Potential: No additional information available.
Mobility in Soil: No additional information available.
Other Adverse Effects: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Treatment Methods
Waste Disposal Recommendations: Dispose of contents/container in accordance with local, regional, national, and international regulations
Additional Information: Container may remain hazardous when empty. Continue to observe all precautions
Ecology-Waste Materials: Avoid release to the environment. This material is hazardous to the aquatic environment. Keep out of sewers and waterways

SECTION 14: TRANSPORT INFORMATION

In Accordance with DOT: Not regulated for transport
In Accordance with IMDG: Not regulated for transport
In Accordance with IATA: Not regulated for transport

SECTION 15: REGULATORY INFORMATION

US Federal Regulations
SARA Section 311/312 Hazard Classes: Immediate (acute) health hazard, Delayed (chronic) health hazard
United States TSCA (Toxic Substances Control Act) list:
Thimerosal (54-64-8): Present
Sodium chloride (7647-14-5): Present
Potassium phosphate, monobasic (7778-77-0): Present
Potassium chloride (7447-40-7): Present
Sodium phosphate, dibasic (7558-79-4): Present
Bovine Serum Albumin (9048-46-8): Present
Water (7732-18-5): Present
Tween-20 (9005-64-5): Present

US State Regulations

Sodium phosphate, dibasic (7558-79-4) present on:
Massachusetts – Right to Know List
New Jersey – Right to Know Hazardous Substance List
Pennsylvania – Right to Know – List and Environmental Hazard List

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

GHS Full Text Phrases:

Acute Tox. 1 (Dermal)	Acute toxicity (dermal) Category 1
Acute Tox. 2 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 2
Acute Tox. 2 (Oral)	Acute toxicity (oral) Category 2
Acute Tox. 4 (Dermal)	Acute toxicity (dermal) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Acute 3	Hazardous to the aquatic environment - Acute Hazard Category 3
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category
Aquatic Chronic 3	Hazardous to the aquatic environment - Chronic Hazard Category
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
STOT RE 2	Specific target organ toxicity (repeated exposure) Category 2
H300	Fatal if swallowed
H302	Harmful if swallowed
H310	Fatal in contact with skin
H312	Harmful in contact with skin
H319	Causes serious eye irritation
H330	Fatal if inhaled
H373	May cause damage to organs through prolonged or repeated
H400	Very toxic to aquatic life
H402	Harmful to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

Revision Date: 11/22/16

Other Information: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.