



SAFETY DATA SHEET

Revision Date 7/18/2016

1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product Identification

Product Name : ([125I]-Tyr)- beta-Atrial Natriuretic Factor (1-28) (Dimer, Antiparallel) (human)
Product Code : H-5136.0010
CAS-No. : N/A; mixture

1.2 Company Identification

Peninsula Laboratories International, Inc.
305 Old County Road
San Carlos, CA 94070
USA

Telephone : (650) 801-6090
Fax : (650) 595-4071
Emergency : (650) 801-6090 (8:30am-5pm Pacific Time)

1.3 Recommended use and Restrictions on use

Laboratory reagent, Research Use Only


2. HAZARD(S) IDENTIFICATION

2.1 Classification of the mixture

GHS-US Classification in accordance with 29 CFR 1910 (OSHA HCS)

Skin corrosion/irritation 1B, H314
Serious eye damage/eye irritation 1, H318
Flammable liquids 3, H226

2.2 GHS Label elements, including precautionary statements

Hazard Pictogram : 

Signal Word : Danger

Hazard statements : H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
H226 Flammable liquid and vapor

Precautionary statements : P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking. spray.
P233 Keep container tightly closed.
P235 Keep cool.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ventilating/lighting/equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P260 Do not breathe dust/fume/gas/mist/vapors/spray.
P264 Wash exposed skin thoroughly after handling.



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- P280 Wear protective gloves, clothing, eye protection.
- P301/P330/P331 If swallowed rinse mouth. Do not induce vomiting.
- P303/P361/P353 If on skin or hair, Remove all contaminated clothing. Rinse skin with water/shower.
- P304/P340 If inhaled, remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P305/P351/P338 If in eyes, Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P310 Immediately call a poison center or doctor/physician.
- P363 Wash contaminated clothing before reuse.
- P370/P378 In case of fire: Use water spray for extinction.
- P403 Store in a well-ventilated place.
- P405 Store locked up.
- P501 Dispose contents/container to comply with local, state and federal regulations.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

- Harmful by inhalation, ingestion, or skin absorption.
- May cause skin irritation.
- May cause severe eye irritation.
- Iodine-125 Radionuclide emits gamma radiation. May cause cancer.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 **Substance** : Not applicable

3.2 **Mixture** :

PRINCIPLE COMPONENTS	CONCENTRATION	CAS No	GHS-US CLASSIFICATION
125-Iodine, Iodine-125 Radionuclide	10uCi	none	Not classified
Acetic Acid	50%	64-19-7	Flam. Liq. 3, H226 Skin Corr. 1B, H314 Eye Damage 1, H318
Water	50%	7732-18-5	Not classified

4. FIRST-AID MEASURES

4.1 Description of First Aid Measures

Inhalation: Supply fresh air breathing. Allow the victim to rest. Remove to fresh air and keep at rest in position comfortable for breathing. Immediately call a poison center or physician.

Ingestion: Rinse mouth. Do not induce vomiting. If vomiting occurs take measures to ensure no material is aspirated into respiratory tract. Immediately call a poison center or physician.

In case of skin contact: Immediately remove all contaminated clothing. Rinse with running water several minutes. Wash with soap and water. Immediately call a poison center or physician.

In case of eye contact: Rinse cautiously for several minutes under running water. Immediately call a poison center or physician.

4.2 Important Symptoms/Effects, acute and delayed

Causes severe skin burns and eye damage.

4.3 Required treatment



Obtain medical assistance.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing agents

Suitable extinguishing agents: Dry powder, carbon dioxide, water spray, alcohol resistant foam. Sand.

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

5.2 Special hazards arising from the substance or mixture

Reactivity: Thermal decomposition generates corrosive vapors.

5.3 Advice for firefighters

Protective equipment: Do not enter fire area without proper protective equipment, including self-contained respiratory protective device.

Firefighting instructions: Use water spray for cooling exposed containers. Exercise caution while fighting chemical fire.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel

Personal precautions, protective equipment, emergency procedures: Wear respiratory protection, safety glasses, gloves, protective clothing including a full length lab coat (see section 8). Avoid dust formation. Avoid breathing dust, vapors, mist, or gas. Ensure adequate ventilation. Evacuate unnecessary personnel.

6.1.2 For emergency responders

Personal precautions, protective equipment, emergency procedures: Equip cleanup crew with proper protection, including: respirator, chemical safety goggles, rubber boots, rubber gloves. Ventilate area, mechanical exhaust. Avoid contact and inhalation. Do not get in eyes, on skin, on clothing. Wash thoroughly after handling.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3 Methods and material for containment and cleanup

Pick up and arrange disposal without creating dust. Sweep up and shovel. Do not flush with water. Blot spills with inert solids, such as sand, clay, diatomaceous earth, acid binders, universal binders, or sawdust as soon as possible. Collect spillage and absorbent material and place in closed container, store away from other materials, for proper disposal. Wash spill site thoroughly and discard contaminated cleanup items in closed container for proper disposal.

6.4 Disposal

Dispose in accordance with local regulation. Discard in radioactive waste.

6.5 References to other sections

See Section 8 Exposure Controls and personal protection.

7. HANDLING AND STORAGE



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7.1 Precautions for safe handling and hygiene

Avoid contact is skin and eyes. Avoid formation of dust and aerosols. Provide ventilation in work area to prevent vapor buildup. Do not breathe dust, mist, vapors, spray. Wash hands and other exposed skin with mild soap and water before eating, drinking, or smoking and when leaving work. Wash contaminated clothing before reusing.

7.2 Conditions for safe storage, and incompatibilities

- Technical measures** : Comply with applicable regulations.
- Storage conditions** : Keep container closed when not in use. Store at -20C.
- Incompatible products** : Strong oxidizers. Metals. Strong bases.
- Incompatible situations** : Sources of ignition. Direct sunlight.

7.3 Specific end use(s)

Apart from uses listed in Section 1.3, no other specific uses are stipulated.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters

Acetic Acid

USA ACGIH	AGCIH TWA (ppm)	10 ppm
USA ACGIH	AGCIH STEL (ppm)	10 ppm
USA OSHA	OSHA PEL (TWA) (mg/m ³)	25 mg/m ³
USA OSHA	OSHA PEL (TWA) (ppm)	10 ppm

8.2 Exposure Controls

Appropriate engineering controls : Avoid contact with skin, eyes, and clothing. General industrial hygiene practice. Emergency eye wash fountains or eye wash bottles and safety showers should be available in the immediate vicinity of any potential exposure. Fume hood.

Personal protective equipment : Avoid all unnecessary exposure by using the following equipment:

Hand protection : Wear protective gloves, that are impermeable and resistant to acids.

Eye protection : Chemical goggles or face shield.

Skin and body protection : Wear suitable protective clothing, such as a laboratory coat. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection : Wear appropriate mask.

Other information : Do not eat, drink, or smoke during use.

Control of environmental exposure : Prevent leakage and spillage if safe to do so.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

- Physical state** : Liquid
- Color** : Colorless
- Odor** : Vinegar odor
- Odor threshold** : No data available



pH	: No data available
Relative evaporation rate	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Self-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 20C	: No data available
Relative density	: No data available
Density	: 1.06 g/ml
Solubility	: Soluble in water
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: 2 cSt
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosive limits	: No data available

10. STABILITY AND REACTIVITY

10.1 Reactivity

Thermal decomposition generates: Corrosive vapors.

10.2 Chemical stability

Acetic acid is stable under normal conditions. Radioactive decay of 125-Iodine.

10.3 Possibility of hazardous reactions

Reacts violently with (some) bases. Release of heat.

10.4 Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5 Incompatible materials

Strong oxidizers. Metals. Strong bases.

10.6 Hazardous decomposition products

Carbon monoxide. Carbon dioxide. Thermal decomposition generates: Corrosive vapors.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acetic Acid, 50% v/v (1+1)	
LD50 oral rat	2138 mg/kg

125-Iodine, Iodine-125 Radionuclide	
Acute toxicity	Skin and eye irritant



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Water (7732-18-5)	
LD50 oral rat	≥90000mg/kg

Routes of Exposure	: Inhalation, absorption (skin and eye contact), ingestion.
Skin corrosion	: Causes severe skin burns and eye damage.
Serious eye damage/irritation	: Causes serious eye damage.
Respiratory or skin sensitization	: Not classified. No sensitizing effect known.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified. May cause cancer.
Reproductive toxicity	: Not classified.
Specific target organ toxicity (single exposure)	: Not classified.
Specific target organ toxicity (repeated exposure)	: Not classified.
Aspiration hazard	: Not classified.
Potential adverse human health effects and symptoms	: Based on the available data, classification criteria are not met.
Symptoms/injuries after eye contact	: Causes serious eye damage.

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. It is the users' responsibility to determine the suitability of this information for the adoption of safety precautions as may be necessary. Peninsula Laboratories International, Inc. shall not be held liable for any damage resulting from the handling of the above product.