



SAFETY DATA SHEET

Revision Date 7/21/2016

1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product Identification

Product Name : ([125I]- Tyr0)-C-Type Natriuretic Peptide (32-53) (human, porcine, rat)
Product Code : H-7094.0010
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)

Serious eye damage/eye irritation 2A, H319

2.2 GHS Label elements, including precautionary statements

Hazard Pictogram : 

Signal Word : Warning

Hazard statements : H319 Causes serious eye irritation.

Precautionary statements : P264 Wash exposed skin thoroughly after handling.
P280 Wear protective gloves, protective clothing, eye protection, face protection.
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.
P337 + P313 If eye irritation persists, get medical advice/attention.
P310 Immediately call a poison center or doctor/physician.
P363 Wash contaminated clothing before reuse.
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.

Sodium azide may react with lead and copper plumbing to form highly explosive metal azides. Rapidly absorbed through skin.

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
Sodium Azide, NaN ₃	.3% w/w in lyophilized powder	26628-22-8	Acute Tox 2, Acute Tox 1; STOT RE 2; Aquatic Acute 1; Aquatic Chronic 1; H300 + H310, H373, H410
Bovine Serum Albumin	53.8% w/w in lyophilized powder	9048-46-8	Not classified
Sodium Phosphate monobasic monohydrate	7.1% w/w lyophilized powder	10049-21-5	Not classified
Sodium Phosphate dibasic anhydrous	31% w/w lyophilized powder	7558-79-4	Eye irritant 2B H320
Sodium Chloride	7.8% w/w lyophilized powder	7647-14-5	Eye irritant 2A H319

4. FIRST-AID MEASURES

4.1 Description of First Aid Measures

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

Inhalation: If breathed in, move person to fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact: Remove all contaminated clothing. Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

In case of eye contact: Flush opened eye for several minutes under running water. Consult a physician.

If swallowed: Never give anything to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Important Symptoms/Effects, acute and delayed

Very toxic and can be fatal. May cause cancer. Please see Section 2 hazard statements.

4.3 Required treatment

Obtain medical assistance.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing agents



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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

No data available.

5.3 Advice for firefighters

Protective equipment: Wear self-contained breathing apparatus for fire-fighting.

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

Discard in radioactive waste, in accordance with local regulation.

6.5 References to other sections

See Section 8 Exposure Controls and personal protection.

7. HANDLING AND STORAGE

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

Keep container closed when not in use. Store at -20C. Do not store near acids. Avoid sources of ignition. Comply with applicable regulations.



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

Component	CAS-No.	Value	Control parameters	Basis
Sodium azide	26628-22-8	C	0.100000 ppm	USA. NIOSH recommended exposure limits
	Remarks	Potential for dermal absorption		
		C	0.300000 mg/m3	USA. NIOSH recommended exposure limits
		Potential for dermal absorption		
		C	0.110000ppm	USA. ACGIH Threshold Limit Values
		Lung damage, cardiac impairment, not classifiable as human carcinogen		
		C	0.290000 mg/m3	USA. ACGIH Threshold Limit Values
		Lung damage, cardiac impairment, not classifiable as human carcinogen		
		C	0.1 ppm	USA. OSHA – Tab Z-1 Limits for Air Contaminants - 1910.1000
		Skin notation		
		C	0.3mg/m3	USA. OSHA – Tab Z-1 Limits for Air Contaminants - 1910.1000
		Skin notation		

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/face protection : Chemical goggles or face shield.



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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 respirator.

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	: Powder, white
Odor	: No data available
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	: No data available
Solubility	: Soluble in 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
Oxidizing properties	: No data available
Explosive limits	: No data available

10. STABILITY AND REACTIVITY

10.1 Reactivity

No data available



10.2 Chemical stability

Radioactive decay of 125-Iodine. Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

Avoid mixtures/contact with incompatible materials (section 10.5).

10.5 Incompatible materials

Acids, metals, halogenated hydrocarbon, acid chlorides, hydrazine, dimethyl sulfate, inorganic acid chlorides, strong oxidizing agents.

10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions- sodium oxides.

Other decomposition products- no data available

In the event of fire, see section 5.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute Toxicity

125-Iodine, Iodine-125 Radionuclide

Skin and eye irritant

Sodium azide

LD50 oral rat 27 mg/kg

Inhalation: no data available

Skin: No data available

Bovine Serum Albumin

No data available

Routes of Exposure : Inhalation, absorption (skin and eye contact), ingestion.

Skin corrosion : Not classified

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):

125-Iodine, Iodine-125 Radionuclide: Thyroid gland; not classified.

Specific target organ toxicity (repeated exposure):

125-Iodine, Iodine-125 Radionuclide: Thyroid gland; not classified.



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Sodium Azide : Brain

Aspiration hazard : Not classified.

Additional information:

Sodium Azide Repeated dose Rat – male and female – Oral – LOAEL : 5mg/kg

RTECS: #VY8050000

Nausea, headache, vomiting, laboratory experiments in animals have shown sodium azide to produce a profound hypotensive effect, demyelination of myelinated nerve fibers in the central nervous system, testicular damage, blindness, attacks of rigidity, and hepatic and cerebral effects.

To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

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.