

Conforms to 93/112/EC and ISO 11014-1

Responsible Name Pierce Administration

? **Section 1. Chemical Product and Company Identification**

Product name Stabilized Streptavidin-Horseradish Peroxidase Conjugated

Product No. 1856228

Supplier	<i>In USA:</i>	<i>In Europe:</i>	Manufacturer	Pierce Biotechnology
	Pierce	Perbio Science		P.O. Box 117
	P.O. Box 117	Industriezone III		Rockford, IL 61105
	Rockford, IL 61105	Industrielaan 27		USA
	USA	9320 Erembodegem-Aalst		815.968.0747 or
	815.968.0747 or	Belgium		1.800.874.3723
	1.800.874.3723	Tel:+32 53 83 44 04		
		Fax:+32 53 83 76 38		

In Case of Emergency CALL CHEMTREC:

800.424.9300
OUTSIDE US:
202.483.7616

Print Date 2/4/2003

Validation Date 2/4/2003

MSDS# 3840

Intended Use Refer to the instruction booklet for proper and intended use. Otherwise, contact supplier for specific applications.

 **Section 2. Composition, Information on Ingredients**

Substance/Preparation : Preparation

<u>Ingredient Name</u>	<u>CAS No.</u>	<u>%</u>	<u>EC Number</u>	<u>Symbol</u>	<u>R-Phrases</u>
1) Guardian™ Stabilizer Ingredient 2		0.1-1	xxx-xxx-x	Xi	R36/37/38

 **Section 3. Hazards Identification**

United States Review the most current and approved institutional guideline, protocol, standard operating procedure(s) and MSDS(s) for the proper handling of institutional materials/equipment associated with the use of this product.

Emergency Overview WARNING!
CONTAINS MATERIAL WHICH CAUSES DAMAGE TO THE FOLLOWING ORGANS:
SKIN, EYES, STOMACH.

Routes of Entry Absorbed through skin. Dermal contact. Eye contact. Inhalation. Ingestion.

Potential Acute Health Effects Non-corrosive for skin. Non-corrosive for lungs.

Carcinogenic Effects Data **CARCINOGENIC EFFECTS:** Classified None. by NIOSH [Guardian™ Stabilizer Ingredient 2].
MUTAGENIC EFFECTS: Not available.
TERATOGENIC EFFECTS: Not available.

Medical Conditions Aggravated by Overexposure: Repeated or prolonged exposure is not known to aggravate medical condition.

Overexposure /Signs/Symptoms Not available.

Europe

Classification Not controlled under dsd (Europe).
Physical/chemical hazards Not applicable.
Human health hazards Not applicable.
Environmental hazards Not applicable.

See Toxicological Information (section 11)

Continued on Next Page

+ Section 4. First Aid Measures

Notice to Reader Get immediate medical attention.

Effects and symptoms

Inhalation Non-corrosive for lungs.

Ingestion Not available.

Skin Contact Irritation of the product in case of skin contact: Not available.

Sensitization of the product: Not available.

Non-corrosive for skin.

Eye Contact Not available.

Aggravating conditions Repeated or prolonged exposure is not known to aggravate medical condition.

First-Aid Measures

Inhalation If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin Contact In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

Eye Contact Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Get medical attention.

Notes to Physician Not available.

Protection of first-aiders Not available.

🔥 Section 5. Fire Fighting Measures

Flammability of the Product Non-flammable.

Flash Points Not applicable.

Fire Hazards in Presence of Various Substances Not applicable.

Fire Fighting Media and Instructions Not applicable.

Protective Clothing (Fire) Not applicable.

Hazardous thermal (de)composition products Not applicable.

Section 6. Accidental Release Measures

Personal precautions Safety glasses. Lab coat. Gloves (impervious).

Environmental Precautions and Clean-up Methods Absorb with an inert material and put the spilled material in an appropriate waste disposal. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

Small Spill and Leak Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

◇ Section 7. Handling and Storage

Handling Avoid breathing vapors or spray mists.

Storage Keep container tightly closed. Keep container in a cool, well-ventilated area.

Intended Use Refer to the instruction booklet for proper and intended use. Otherwise, contact supplier for specific applications.

Packaging materials

Continued on Next Page

Suitable / Not suitable Use original container.

Section 8. Exposure Controls/Personal Protection

Engineering Controls Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

Exposure Limit Values

<u>Ingredient Name</u>	<u>Occupational Exposure Limits</u>
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United States

Sweden

1) Guardian™ Stabilizer Ingredient 2	Not available.
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Denmark

1) Guardian™ Stabilizer Ingredient 2	Not available.
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Norway

1) Guardian™ Stabilizer Ingredient 2	Not available.
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France

1) Guardian™ Stabilizer Ingredient 2	Not available.
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Netherlands

1) Guardian™ Stabilizer Ingredient 2	Not available.
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Germany

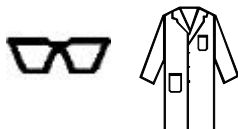
1) Guardian™ Stabilizer Ingredient 2	Not available.
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Personal Protection

Eyes Safety glasses.

Body Lab coat.

Protective Clothing
(Pictograms)



Section 9. Physical and Chemical Properties

Physical State and Appearance Liquid.

Odor Not available.

Molecular Weight Not applicable.

Taste Not available.

pH (1% Soln/Water) Neutral.

Color Not available.

Boiling/Condensation Point The lowest known value is 100°C (212°F) (Milli-Q Water). Weighted average: 100°C (212°F)

Melting/Freezing Point May start to solidify at 0°C (32°F) based on data for: North2South® Direct Nuclease-Free Water. Weighted average: -0.01°C (32°F)

Specific Gravity Weighted average: 1 (Water = 1)

Vapor Pressure The highest known value is 2.3 kPa (@ 20°C) (Milli-Q Water).

Vapor Density The highest known value is 0.62 (Air = 1) (Milli-Q Water).

Evaporation Rate 0.36 (Milli-Q Water) compared to Butyl acetate.

Dispersion Properties

Continued on Next Page

Stabilized Streptavidin-Horseradish Peroxidase Conjugated

Page: 4/6

See solubility in water, methanol, diethyl ether, acetone.

Solubility Soluble in methanol, diethyl ether.
Partially soluble in cold water, hot water, acetone.

Physical Chemical None.
Comments



Section 10. Stability and Reactivity

Stability and Reactivity The product is stable.

Conditions to avoid Not available.

Materials to avoid Not available.

Hazardous Polymerization Will not occur.

Hazardous Decomposition Products Not applicable.



Section 11. Toxicological Information

Toxicity to Animals LD50: Not available.

LC50: Not available.

Chronic Effects on Humans **CARCINOGENIC EFFECTS:** Classified None. by NIOSH [Guardian™ Stabilizer Ingredient 2].

Other Toxic Effects on Humans No specific information is available in our database regarding the other toxic effects of this material for humans.

Special Remarks on Toxicity to Animals Not available.

Special Remarks on Chronic Effects on Humans Not available.

Special Remarks on Other Toxic Effects on Humans To the best of our knowledge, the toxicological properties of this product have not been thoroughly investigated. (Guardian™ Stabilizer Ingredient 13)



Section 12. Ecological Information

Mobility Not available.

Persistence/degradability Not available.

Bioaccumulative potential Not available.

Ecotoxicity Not available.

Germany water class VCI WGK: No products were found.



Section 13. Disposal Considerations

Waste Information Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Waste Stream Not available.

Consult your local or regional authorities.

Continued on Next Page

Section 14. Transport Information

Contact the supplier for all information regarding the proper transportation method for this material.

Section 15. Regulatory Information

Label Requirements (Europe)

This product is not classified according to the EU regulations.

HCS Classification

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U.S. Federal Regulations TSCA 8(b) inventory: Guardian™ Stabilizer Ingredient 1; Guardian™ Stabilizer Ingredient 2; Guardian™ Stabilizer Ingredient 3; Guardian™ Stabilizer Ingredient 4; Guardian™ Stabilizer Ingredient 5; Guardian™ Stabilizer Ingredient 6; Guardian™ Stabilizer Ingredient 7; Guardian™ Stabilizer Ingredient 8; Guardian™ Stabilizer Ingredient 9; Guardian™ Stabilizer Ingredient 11; Guardian™ Stabilizer Ingredient 12; Guardian™ Stabilizer Ingredient 13; Milli-Q Water
SARA 302/304/311/312 extremely hazardous substances: No products were found.
SARA 302/304 emergency planning and notification: No products were found.
SARA 302/304/311/312 hazardous chemicals: Guardian™ Stabilizer Ingredient 2; Guardian™ Stabilizer Ingredient 3; Guardian™ Stabilizer Ingredient 5; Guardian™ Stabilizer Ingredient 6; Guardian™ Stabilizer Ingredient 11; Guardian™ Stabilizer Ingredient 12
SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Guardian™ Stabilizer Ingredient 2: immediate health hazard, delayed health hazard; Guardian™ Stabilizer Ingredient 3: immediate health hazard, delayed health hazard; Guardian™ Stabilizer Ingredient 5: immediate health hazard, delayed health hazard; Guardian™ Stabilizer Ingredient 6: delayed health hazard; Guardian™ Stabilizer Ingredient 11: fire, immediate health hazard, delayed health hazard; Guardian™ Stabilizer Ingredient 12: fire, immediate health hazard, delayed health hazard

Clean Water Act (CWA) 307: No products were found.
Clean Water Act (CWA) 311: No products were found.
Clean air act (CAA) 112 accidental release prevention: Guardian™ Stabilizer Ingredient 12
Clean air act (CAA) 112 regulated flammable substances: Guardian™ Stabilizer Ingredient 12
Clean air act (CAA) 112 regulated toxic substances: No products were found.

WHMIS (Canada) Not controlled under WHMIS (Canada).

CEPA DSL: Guardian™ Stabilizer Ingredient 1; Guardian™ Stabilizer Ingredient 2; Guardian™ Stabilizer Ingredient 3; Guardian™ Stabilizer Ingredient 4; Guardian™ Stabilizer Ingredient 5; Guardian™ Stabilizer Ingredient 6; Guardian™ Stabilizer Ingredient 8; Guardian™ Stabilizer Ingredient 9; Guardian™ Stabilizer Ingredient 11; Guardian™ Stabilizer Ingredient 12; Guardian™ Stabilizer Ingredient 13; Milli-Q Water

CEPA NDSL: Guardian™ Stabilizer Ingredient 7

International Regulations

EINECS Not available.

DSCL (EEC) This product is not classified according to the EU regulations.

International Lists Australia (NICNAS): Guardian™ Stabilizer Ingredient 1; Guardian™ Stabilizer Ingredient 2; Guardian™ Stabilizer Ingredient 3; Guardian™ Stabilizer Ingredient 4; Guardian™ Stabilizer Ingredient 5; Guardian™ Stabilizer Ingredient 6; Guardian™ Stabilizer Ingredient 8; Guardian™ Stabilizer Ingredient 9; Guardian™ Stabilizer Ingredient 11; Guardian™ Stabilizer Ingredient 12; Guardian™ Stabilizer Ingredient 13; Milli-Q Water

Germany water class: Guardian™ Stabilizer Ingredient 2; Guardian™ Stabilizer Ingredient 3; Guardian™ Stabilizer Ingredient 6; Guardian™ Stabilizer Ingredient 11; Guardian™ Stabilizer Ingredient 12

Korea (TCCL): Guardian™ Stabilizer Ingredient 2; Guardian™ Stabilizer Ingredient 3; Guardian™ Stabilizer Ingredient 5; Guardian™ Stabilizer Ingredient 6; Guardian™ Stabilizer Ingredient 8; Guardian™ Stabilizer Ingredient 9; Guardian™ Stabilizer Ingredient 11; Guardian™ Stabilizer Ingredient 12; Guardian™ Stabilizer Ingredient 13; Milli-Q Water

Philippines (RA6969): Guardian™ Stabilizer Ingredient 2; Guardian™ Stabilizer Ingredient 3; Guardian™ Stabilizer Ingredient 4; Guardian™ Stabilizer Ingredient 5; Guardian™ Stabilizer Ingredient 6; Guardian™ Stabilizer Ingredient 8; Guardian™ Stabilizer Ingredient 9; Guardian™ Stabilizer Ingredient 11; Guardian™ Stabilizer Ingredient 12; Guardian™ Stabilizer Ingredient 13; Milli-Q Water

State Regulations Pennsylvania RTK: Guardian™ Stabilizer Ingredient 11: (generic environmental hazard); Guardian™ Stabilizer Ingredient 12: (environmental hazard, generic environmental hazard)

Florida: Guardian™ Stabilizer Ingredient 12

Massachusetts RTK: Guardian™ Stabilizer Ingredient 11; Guardian™ Stabilizer Ingredient 12

New Jersey: Guardian™ Stabilizer Ingredient 11; Guardian™ Stabilizer Ingredient 12

California prop. 65: No products were found.

Section 16. Other Information

**Hazardous Material
Information System
(U.S.A.)**

Health	*	0
Fire Hazard		0
Reactivity		0
Personal Protection		a

**National Fire Protection
Association (U.S.A.)**



References Not available.

History of Document Changes Any information changes since last document version are marked with a triangle symbol.

Full text of R-Phrases Irritating to eyes, respiratory system and skin.
referenced under headings 2 and 3:

Intended Use Refer to the instruction booklet for proper and intended use. Otherwise, contact supplier for specific applications.

Validated by Pierce Administration on 2/4/2003.

Verified by Pierce Administration.

Date of Previous Issue 1/15/2003

Printed 2/4/2003.

Version 2

Notice to Reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.