

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

Responsible Name Pierce Administration

? Section 1. Chemical Product and Company Identification

Product name **SilverSNAP Stain**

Product No. 1856218 1900337 component of #0024602

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

In Case of Emergency CALL CHEMTREC:

800.424.9300
OUTSIDE US:
202.483.7616

Print Date 11/20/2002

Validation Date **11/4/2002**

MSDS# 3837

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) SilverSNAP Stain Component 1		0.1-1	231-853-9	C, N	R34, R50/53

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!

CAUSES RESPIRATORY TRACT, EYE AND SKIN BURNS.
CONTAINS MATERIAL WHICH CAUSES DAMAGE TO THE FOLLOWING ORGANS: MUCOUS MEMBRANES, RESPIRATORY TRACT, SKIN, EYES, EYE, LENS OR CORNEA, NOSE, SINUSES.
MAY BE HARMFUL IF INHALED, ABSORBED THROUGH SKIN OR SWALLOWED.

Do not get in eyes, on skin or on clothing. Avoid prolonged contact with eyes, skin, and clothing. Do not ingest. Do not breathe vapor or mist. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.

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

Potential Acute Health Effects Hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation (lung irritant). Slightly hazardous in case of inhalation (lung sensitizer).

Carcinogenic Effects Data **CARCINOGENIC EFFECTS:** Classified None. by NIOSH [SilverSNAP Stain Component 1].
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 R20/21/22

Physical/chemical hazards Not applicable.

Human health hazards Harmful by inhalation, in contact with skin and if swallowed.

Environmental hazards Not applicable.

See Toxicological Information (section 11)

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Section 4. First Aid Measures

Notice to Reader Get immediate medical attention.

Effects and symptoms

- Inhalation* Hazardous in case of inhalation (lung irritant). Slightly hazardous in case of inhalation (lung sensitizer).
Ingestion Hazardous in case of ingestion.
Skin Contact Sensitization of the product: Not available.
 Hazardous in case of skin contact (irritant). Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.
Eye Contact Hazardous in case of eye contact (irritant).
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 immediately.
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 for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.
Eye Contact Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention immediately.
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 available.

Section 6. Accidental Release Measures

- Personal precautions* Splash goggles. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.
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. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.
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 prolonged contact with eyes, skin, and clothing. Do not ingest. Do not breathe vapor or mist. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.
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.

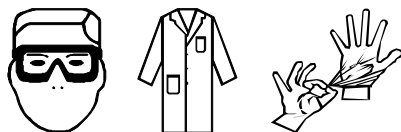
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Packaging materialsSuitable / Not suitable Use original container.**Section 8. Exposure Controls/Personal Protection**

Engineering Controls Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Exposure Limit Values**Ingredient Name****Occupational Exposure Limits****United States****Sweden**1) SilverSNAP Stain Component 1 TWA: 0.1 (mg/m³) from AFS [Sweden] [1996] Inhalation**Denmark**

1) SilverSNAP Stain Component 1 Not available.

Norway1) SilverSNAP Stain Component 1 TWA: 0.01 (mg/m³) from Arbeidstilsynet [Norway] [1996] Inhalation**France**1) SilverSNAP Stain Component 1 TWA: 0.01 (mg/m³) from INRS [France] [1996] Inhalation**Netherlands**1) SilverSNAP Stain Component 1 TWA: 0.01 (mg/m³) from Arbeidsinspectie [Netherlands] [2000] Inhalation**Germany**1) SilverSNAP Stain Component 1 TWA: 0.01 (mg/m³) from BAuA [Germany] [1997] Inhalation**Personal Protection****Eyes** Splash goggles.**Body** Lab coat.**Hands** Gloves.**Respiratory** Respirator is not needed under normal and intended conditions of use, if exposures are kept below established limits.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).**Melting/Freezing Point** May start to solidify at -0.1°C (31.8°F) based on data for: Milli-Q Water.**Specific Gravity** The only known value is 1 (Water = 1) (Milli-Q Water).**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.**Continued on Next Page**

Dispersion Properties See solubility in water.

Solubility Easily soluble in cold water, hot water.

Section 10. Stability and Reactivity

Stability and Reactivity The product is stable.

Conditions to avoid Not available.

Materials to avoid Reactive with reducing agents, organic materials, alkalis.

Hazardous Decomposition Products Not available.

Section 11. Toxicological Information

Toxicity to Animals LD50: Not available.
LC50: Not available.

Chronic Effects on Humans **CARCINOGENIC EFFECTS:** Classified None. by NIOSH [SilverSNAP Stain Component 1].

Other Toxic Effects on Humans Hazardous in case of eye contact (irritant), of ingestion, of inhalation (lung irritant).
Slightly hazardous in case of eye contact (corrosive), of inhalation (lung sensitizer, lung corrosive).

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.

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.

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)

R20/21/22- Harmful by inhalation, in contact with skin and if swallowed.

S23- Do not breathe gas/fumes/vapour/spray [***]

S24/25- Avoid contact with skin and eyes.



Harmful

HCS Classification

Target organ effects.

U.S. Federal Regulations TSCA 8(b) inventory: Milli-Q Water; SilverSNAP Stain Component 1

SARA 302/304/311/312 extremely hazardous substances: SilverSNAP Stain Component 1

SARA 302/304 emergency planning and notification: No products were found.

SARA 302/304/311/312 hazardous chemicals: SilverSNAP Stain Component 1

SARA 311/312 MSDS distribution - chemical inventory - hazard identification: SilverSNAP Stain Component 1: fire, immediate health hazard, delayed health hazard

Clean Water Act (CWA) 307: SilverSNAP Stain Component 1

Clean Water Act (CWA) 311: No products were found.

Clean air act (CAA) 112 accidental release prevention: No products were found.

Clean air act (CAA) 112 regulated flammable substances: No products were found.

Clean air act (CAA) 112 regulated toxic substances: No products were found.

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

CEPA DSL: Milli-Q Water; SilverSNAP Stain Component 1

International Regulations

EINECS Not available.

DSCL (EEC) R20/21/22- Harmful by inhalation, in contact with skin and if swallowed.

International Lists Australia (NICNAS): Milli-Q Water; SilverSNAP Stain Component 1

Germany water class: SilverSNAP Stain Component 1

Korea (TCCL): Milli-Q Water; SilverSNAP Stain Component 1

Philippines (RA6969): Milli-Q Water; SilverSNAP Stain Component 1

State Regulations Pennsylvania RTK: SilverSNAP Stain Component 1: (environmental hazard, generic environmental hazard)

Massachusetts RTK: SilverSNAP Stain Component 1

New Jersey: SilverSNAP Stain Component 1

California prop. 65: No products were found.

Section 16. Other Information

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

Health	*	1
Fire Hazard		0
Reactivity		0
Personal Protection		h

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



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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
referenced under headings 2 and 3: Causes burns.

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

Validated by Pierce Administration on 11/4/2002.

Verified by Pierce Administration.

Date of Previous Issue No Previous Validation

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Version

0.01

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.