

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

Responsible Name Pierce Administration

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

Product name UltraLink Immobilized Streptavidin Plus Gel

Product No. 0053116 0053117 0053117B 0053118

Supplier	In USA:	In Europe:	Manufacturer
	Pierce P.O. Box 117 Rockford, IL 61105 USA 815.968.0747 or 1.800.874.3723	Perbio Science Industriezone III Industrielaan 27 9320 Erembodegem-Aalst Belgium 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 11/10/2002
Validation Date 11/6/2002
MSDS# 2355

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) Azlactone Acrylamide Copolymer		10-20	Not available.	Xi	R36

 **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 No specific hazard.

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

Potential Acute Health Effects Slightly hazardous in case of skin contact (irritant), of eye contact (irritant). Non-hazardous in case of ingestion. Non-hazardous in case of inhalation.

Carcinogenic Effects Data **CARCINOGENIC EFFECTS:** Not available.
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)

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Section 4. First Aid Measures

Notice to Reader Get immediate medical attention.

Effects and symptoms

Inhalation Non-hazardous in case of inhalation.

Ingestion Non-hazardous in case of ingestion.

Skin Contact Sensitization of the product: Not available.

Slightly hazardous in case of skin contact (irritant). Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

Eye Contact Slightly 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.

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 Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops.

Eye Contact Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Get medical attention if irritation occurs.

Notes to Physician Not available.

Protection of first-aiders Not available.

Section 5. Fire Fighting Measures

Flammability of the Product May be combustible at high temperature.

Flash Points Not available.

Fire Hazards in Presence of Various Substances Slightly flammable to flammable in presence of open flames and sparks, of heat. Non-flammable in presence of shocks, of organic materials, of metals, of acids, of alkalis.

Fire Fighting Media and Instructions SMALL FIRE: Use DRY chemical powder.

LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Protective Clothing (Fire) Be sure to use an approved/certified respirator or equivalent.

Special Remarks on Fire Hazards HIGHLY FLAMMABLE: Will be easily ignited by heat, sparks or flames. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Vapor explosion hazard indoors, outdoors or in sewers. Some may polymerize (P) explosively when heated or involved in a fire. Runoff to sewer may create fire or explosion hazard. Containers may explode when heated. Many liquids are lighter than water. (UltraLink Biosupport Medium)

Hazardous thermal (de)composition products Not available.

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 Absorb with an inert material and put the spilled material in an appropriate waste disposal.

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◆ 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. Store between 2 to 8°C (35.6 to 46.4°F).

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

Packaging materials

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. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Exposure Limit Values

<u>Ingredient Name</u>	<u>Occupational Exposure Limits</u>
United States	
1) Azlactone Acrylamide Copolymer	Not available.
Sweden	
1) Azlactone Acrylamide Copolymer	Not available.
Denmark	
1) Azlactone Acrylamide Copolymer	Not available.
Norway	
1) Azlactone Acrylamide Copolymer	Not available.
France	
1) Azlactone Acrylamide Copolymer	Not available.
Netherlands	
1) Azlactone Acrylamide Copolymer	Not available.
Germany	
1) Azlactone Acrylamide Copolymer	Not available.

Personal Protection

Eyes Safety glasses.

Body Lab coat.

Protective Clothing
(Pictograms)



**Section 9. Physical and Chemical Properties**

<i>Physical State and Appearance</i>	Liquid.	<i>Odor</i>	Not available.
<i>Molecular Weight</i>	Not applicable.	<i>Taste</i>	Not available.
<i>pH (1% Soln/Water)</i>	Neutral.	<i>Color</i>	Clear Off-white.
<i>Boiling/Condensation Point</i>	The lowest known value is 100°C (212°F) (Deionized Water).		
<i>Melting/Freezing Point</i>	May start to solidify at -0.1°C (31.8°F) based on data for: Deionized Water.		
<i>Specific Gravity</i>	The only known value is 1 (Water = 1) (Deionized Water).		
<i>Vapor Pressure</i>	The highest known value is 2.3 kPa (@ 20°C) (Deionized Water).		
<i>Vapor Density</i>	The highest known value is 0.62 (Air = 1) (Deionized Water).		
<i>Volatility</i>	100% (v/v). (UltraLink Biosupport Medium.)		
<i>Evaporation Rate</i>	0.36 (Deionized Water) compared to (n-BUTYL ACETATE=1)		
<i>VOC</i>	99 (%)		
<i>LogK_{ow}</i>	The product is more soluble in oil.		
<i>Dispersion Properties</i>	Is not dispersed in cold water, hot water, methanol, diethyl ether, n-octanol. See solubility in methanol, diethyl ether, n-octanol.		
<i>Solubility</i>	Easily soluble in methanol, diethyl ether. Partially soluble in n-octanol. Insoluble in cold water, hot water.		

**Section 10. Stability and Reactivity**

<i>Stability and Reactivity</i>	The product is stable.
<i>Conditions to avoid</i>	Not available.
<i>Materials to avoid</i>	Not available.
<i>Hazardous Polymerization</i>	Will not occur.
<i>Hazardous Decomposition Products</i>	Not available.

**Section 11. Toxicological Information**

<i>Toxicity to Animals</i>	LD50: Not available. LC50: Not available.
<i>Chronic Effects on Humans</i>	Contains material which causes damage to the following organs: central nervous system (CNS).
<i>Other Toxic Effects on Humans</i>	Slightly hazardous in case of eye contact (irritant). Non-hazardous in case of inhalation. Non-irritant for lungs.
<i>Special Remarks on Toxicity to Animals</i>	Not available.
<i>Special Remarks on Chronic Effects on Humans</i>	possible irritant
<i>Special Remarks on Other Toxic Effects on Humans</i>	To the best of our knowledge, the toxicological properties of this product have not been thoroughly investigated. (Azlactone Acrylamide Copolymer)

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Section 12. Ecological Information

<i>Mobility</i>	Not available.
<i>Persistence/degradability</i>	Not available.
<i>Bioaccumulative potential</i>	Not available.
<i>Ecotoxicity</i>	Not available.
<i>Germany water class</i>	VCI WGK: No products were found.



Section 13. Disposal Considerations

<i>Waste Information</i>	Waste must be disposed of in accordance with federal, state and local environmental control regulations.
<i>Waste Stream</i>	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)

This product is not classified according to the EU regulations.

HCS Classification

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U.S. Federal Regulations

TSCA 4(a) final test rules: UltraLink Biosupport Medium
TSCA 8(a) PAIR: Triton X-100
TSCA 8(b) inventory: Triton X-100; Water; UltraLink Biosupport Medium; Deionized Water
TSCA 8(d) H and S data reporting: UltraLink Biosupport Medium
TSCA 12(b) one time export: UltraLink Biosupport Medium
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: Triton X-100; UltraLink Biosupport Medium
SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Triton X-100: immediate health hazard, delayed health hazard;
UltraLink Biosupport Medium: fire, immediate health hazard, delayed health hazard
SARA 313 toxic chemical notification and release reporting: No products were found.
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: 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: Triton X-100; Water; UltraLink Biosupport Medium; Deionized Water

International Regulations

EINECS Not available.

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

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International Lists Australia (NICNAS): Triton X-100; Water; UltraLink Biosupport Medium; Deionized Water

Germany water class: UltraLink Biosupport Medium

VCI WGK: No products were found.

Korea (TCCL): Triton X-100; Water; UltraLink Biosupport Medium; Deionized Water

Philippines (RA6969): Triton X-100; Water; UltraLink Biosupport Medium; Deionized Water

State Regulations Pennsylvania RTK: UltraLink Biosupport Medium: (environmental hazard, generic environmental hazard)

Massachusetts RTK: UltraLink Biosupport Medium

Massachusetts spill list: UltraLink Biosupport Medium

New Jersey: UltraLink Biosupport Medium

California prop. 65: No products were found.

Section 16. Other Information

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

Health	1
Fire Hazard	1
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.
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 11/6/2002.

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.