

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

Responsible Name Pierce Administration

## ? Section 1. Chemical Product and Company Identification

Product name **T-PER® Protein Extraction Reagent**

Product No. 0078510 1900363

|                 |                    |                        |                     |                      |
|-----------------|--------------------|------------------------|---------------------|----------------------|
| <b>Supplier</b> | <i>In USA:</i>     | <i>In Europe:</i>      | <b>Manufacturer</b> | 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 6/4/2003

Validation Date **6/4/2003**

MSDS# 3189

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) Proprietary Detergent |                | 0.1-1    | Not available.   | Xi            | R37              |

## 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. Dermal contact. Eye contact. Inhalation. Ingestion.

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

**Carcinogenic Effects Data** **CARCINOGENIC EFFECTS:** Classified None. by OSHA [Proprietary Detergent]. Classified None. by NIOSH [Bicine].

**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* Slightly hazardous in case of inhalation (lung irritant).

*Ingestion* Harmful if swallowed.

*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 if symptoms appear.

*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. Cold water may be used.

*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 if irritation occurs.

*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. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

*Environmental Precautions and Clean-up Methods* Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not get water inside container. Do not touch spilled material. Use water spray curtain to divert vapor drift. Prevent entry into sewers, basements or confined areas; dike if needed. Eliminate all ignition sources. Call for assistance on disposal. **Neutralize the residue with a dilute solution of sodium carbonate.** 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 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**  
**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> |
|--------------------------|-------------------------------------|
| <b>United States</b>     |                                     |
| <b>Sweden</b>            |                                     |
| 1) Proprietary Detergent | Not available.                      |
| <b>Denmark</b>           |                                     |
| 1) Proprietary Detergent | Not available.                      |
| <b>Norway</b>            |                                     |
| 1) Proprietary Detergent | Not available.                      |
| <b>France</b>            |                                     |
| 1) Proprietary Detergent | Not available.                      |
| <b>Netherlands</b>       |                                     |
| 1) Proprietary Detergent | Not available.                      |
| <b>Germany</b>           |                                     |
| 1) Proprietary Detergent | Not available.                      |

### 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.

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**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.

**Dispersion Properties** See solubility in water.

**Solubility** Partially soluble in cold water, hot water.



## Section 10. Stability and Reactivity

**Stability and Reactivity** The product is stable.

**Conditions to avoid** Keep away from heat and direct sunlight. (Proprietary Detergent)

**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 OSHA [Proprietary Detergent]. Classified None. by NIOSH [Bicine].

**Other Toxic Effects on Humans** Slightly hazardous in case of eye contact (irritant), of inhalation (lung irritant).

**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. (Bicine)



## 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.

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## 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)

This product is not classified according to the EU regulations.

### HCS Classification

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**U.S. Federal Regulations** TSCA 8(b) inventory: Milli-Q Water; Sodium Chloride; Bicine

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: No products were found.

SARA 311/312 MSDS distribution - chemical inventory - hazard identification: No products were found.

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: Milli-Q Water

CEPA NDSL: Bicine

### International Regulations

**EINECS** Not available.

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

**International Lists** Australia (NICNAS): Milli-Q Water; Bicine

Korea (TCCL): Milli-Q Water

Philippines (RA6969): Milli-Q Water; Bicine

**State Regulations** No products were found.

**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 | g |

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 referenced under headings 2 and 3:* Irritating to respiratory system.

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

Validated by Pierce Administration on 6/4/2003.

Verified by Pierce Administration.

Date of Previous Issue No Previous Validation

Printed 6/4/2003.

Version 0.02

**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.*