

Responsible Name Pierce Administration

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

Common Name **Seize™ X Bacterial Immunoprecipitation Kit**

Code 0045220

Supplier Pierce Chemical Company  
P.O. Box 117  
Rockford, IL 61105  
USA  
815.968.0747 or  
1.800.874.3723

In Case of Emergency CALL CHEMTREC:  
800.424.9300  
OUTSIDE US:  
202.483.7616

Print Date 7/24/2001

Validation Date **7/24/2001**

MSDS# 3602

Component/Item#	1) ImmunoPure Plus Immobilized Protein G	1885350 1856205
	2) Non-Reducing Lane Marker Sample Buffer	0039001
	3) BupH Tris Buffered Saline Packs	0028376
	4) BupH Packs Dulbecco's PBS Buffer Packs	0028374
	5) ImmunoPure IgG Elution Buffer	1884060 1890271
	6) B-PER® Bacterial Protein Extraction Reagent, 25 ml	1858079
	7) DSS	1856200 or 21658
	8) Spin X Tubes with White Underivatd Filter Paper	1889603
	9) Dolphin Tubes	1889479

Manufacturer Pierce Chemical Company  
P.O. Box 117  
Rockford, IL 61105  
USA  
815.968.0747 or  
1.800.874.3723

**Section 2. Composition and Information on Hazardous (OSHA) Ingredients**

Name	% by weight (in kit)	Exposure Limits
1) Tris hydrochloride	3-5	Not available.
2) Glycerol (Non-Reducing Lane Marker Sample Buffer)	1-3	TWA: 10 (mg/m <sup>3</sup> ) from ACGIH (TLV) [United States] TWA: 10 (ppb) from ACGIH (TLV) [United States] [1994] Inhalation TWA: 5 (mg/m <sup>3</sup> ) from OSHA (PEL) [United States] [1989] Inhalation Respirable.
3) Tris(hydroxymethyl)aminomethane	3-5	Not available.
4) Sodium Azide (Immunopure Plus Protein G)	0.02	CEIL: 0.11 (ppm) from ACGIH (TLV) [United States] [1996] Inhalation TWA: 0.1 CEIL: 0.29 (ppb) from ACGIH (TLV) [United States] [1996] Inhalation TWA: 0.3 CEIL: 0.1 (ppm) from NIOSH [United States] [1994] SKIN STEL: 0.3 CEIL: 0.3 (mg/m <sup>3</sup> ) from NIOSH [United States] [1994] SKIN TWA: 0.2 CEIL: 0.1 (ppm) from OSHA (PEL) [United States] [1989] SKIN TWA: 0.3 CEIL: 0.3 (mg/m <sup>3</sup> ) from OSHA (PEL) [United States] [1989] SKIN

### Section 3. Hazards Identification

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 Pierce product.

**Emergency Overview** Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep container closed. Use only with adequate ventilation. Avoid exposure during pregnancy. Wash thoroughly after handling.

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

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

**Carcinogenic Effects Data** **CARCINOGENIC EFFECTS:** Classified None. by NIOSH [SDS]. Classified 3 (Not classifiable for human.) by IARC [Elution Buffer Ingredient 1].  
**MUTAGENIC EFFECTS:** Not available.

**Medical Conditions Aggravated by Overexposure:** **TERATOGENIC EFFECTS:** Classified POSSIBLE for human [SDS].  
Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

See Toxicological Information (section 11)

### Section 4. First Aid Measures

**SKIN:** Wash contaminated skin with soap and water.

**EYES:** Flush with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Seek medical attention.

**Inhalation:** Move exposed person to fresh air. If irritation persists, get medical attention.

**Ingestion:** Do not induce vomiting. If affected person is conscious, give plenty of water to drink. Seek medical attention.

### Section 5. Fire Fighting Measures

**Flammability of the Product** May be combustible at high temperature.

<b>Flash Points</b>	1) ImmunoPure Plus Immobilized Protein G	Not available.
	2) Non-Reducing Lane Marker Sample Buffer	The lowest known value is CLOSED CUP: 160°C (320°F). OPEN CUP: 177°C (350.6°F). (Glycerol)
	3) BupH Tris Buffered Saline Packs	Not available.
	4) BupH Packs Dulbecco's PBS Buffer Packs	Not applicable.
	5) ImmunoPure IgG Elution Buffer	Not applicable.
	6) B-PER® Bacterial Protein Extraction Reagent, 25 ml	Not applicable.
	7) DSS	Not available.
	8) Spin X Tubes with White Underivatized Filter Paper	Not available.
	9) Dolphin Tubes	Not available.

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

**Fire Fighting Media** SMALL FIRE: Use DRY chemical powder.

**and Instructions** 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** Non combustible. (Elution Buffer Ingredient 1)

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## Section 6. Accidental Release Measures

<i>Small Spill and Leak</i>	<p>1) ImmunoPure Plus Immobilized Protein G</p> <p>2) Non-Reducing Lane Marker Sample Buffer</p> <p>3) BupH Tris Buffered Saline Packs</p> <p>4) BupH Packs Dulbecco's PBS Buffer Packs</p> <p>5) ImmunoPure IgG Elution Buffer</p> <p>6) B-PER® Bacterial Protein Extraction Reagent, 25 ml</p> <p>7) DSS</p> <p>8) Spin X Tubes with White Underivatized Filter Paper</p> <p>9) Dolphin Tubes</p>	<p>Absorb with an inert material and put the spilled material in an appropriate waste disposal.</p> <p>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.</p> <p>Use appropriate tools to put the spilled solid in a convenient waste disposal container. If necessary: <b>Neutralize the residue with a dilute solution of acetic acid.</b> Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.</p> <p>Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.</p> <p>Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. If necessary: <b>Neutralize the residue with a dilute solution of sodium carbonate.</b> Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.</p> <p>Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. If necessary: <b>Neutralize the residue with a dilute solution of sodium carbonate.</b> Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.</p> <p>Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.</p> <p>Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.</p> <p>Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.</p>
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## Section 7. Handling and Storage

*Handling* Avoid contact with eyes, skin, and clothing. Avoid breathing vapors or spray mists. 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.

## 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.

*Personal Protection*

*Eyes* Splash goggles.

*Body* Lab coat.

*Respiratory* Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.

*Hands* Gloves.

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Protective Clothing  
(Pictograms)



Consult local authorities for acceptable exposure limits.

## Section 9. Physical and Chemical Properties

Component	Physical State and Appearance	Color
1) ImmunoPure Plus Immobilized Protein G	Liquid. (Suspension.)	Clear Off-white.
2) Non-Reducing Lane Marker Sample Buffer	Liquid.	Bright pink Clear
3) BupH Tris Buffered Saline Packs	Solid. (Granular solid.)	White. Off-white.
4) BupH Packs Dulbecco's PBS Buffer Packs	Solid. (Granular solid.)	White.
5) ImmunoPure IgG Elution Buffer	Liquid.	Not available.
6) B-PER® Bacterial Protein Extraction Reagent, 25 ml	Liquid.	Not available.
7) DSS	Solid. (Solid powder.)	White.
8) Spin X Tubes with White Underivatd Filter Paper	Solid. (Tubes)	Not available.
9) Dolphin Tubes	Solid. (Tubing)	Not available.

## Section 10. Stability and Reactivity

*Stability and Reactivity* The product is stable.

*Conditions of Instability* Keep away from heat and direct sunlight. Keep away from incompatibles. (B-PER® Bacterial Protein Extraction Reagent Ingredient 1)

*Incompatibility with Various Substances* Slightly reactive to reactive with oxidizing agents, metals, acids, alkalis.

*Hazardous Decomposition Products*

## Section 11. Toxicological Information

<i>Toxicity to Animals</i> 1) ImmunoPure Plus Immobilized Protein G	LD50: Not available. LC50: Not available.
2) Non-Reducing Lane Marker Sample Buffer	Acute oral toxicity (LD50): 1288 mg/kg [Rat]. (SDS).
3) BupH Tris Buffered Saline Packs	Acute oral toxicity (LD50): 4000 mg/kg [Mouse]. (Sodium Chloride). Chronic oral toxicity (LD50): 3000 mg/kg [Rat]. (Sodium Chloride). Acute dermal toxicity (LD50): 10000 mg/kg [Rabbit]. (Sodium Chloride).
4) BupH Packs Dulbecco's PBS Buffer Packs	LD50: Not available. LC50: Not available.
5) ImmunoPure IgG Elution Buffer	LD50: Not available. LC50: Not available.
6) B-PER® Bacterial Protein Extraction Reagent, 25 ml	LD50: Not available. LC50: Not available.
7) DSS	LD50: Not available. LC50: Not available.
8) Spin X Tubes with White Underivatd Filter Paper	LD50: Not available. LC50: Not available.
9) Dolphin Tubes	LD50: Not available. LC50: Not available.

*Chronic Effects on Humans* **CARCINOGENIC EFFECTS:** Classified None. by NIOSH [SDS]. Classified 3 (Not classifiable for human.) by IARC [Elution Buffer Ingredient 1].

**TERATOGENIC EFFECTS:** Classified POSSIBLE for human [SDS].

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

*Special Remarks on Chronic Effects on Humans* There are no known hazards associated with this product. (BupH Dulbecco's PBS Buffer Packs)

*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. (Tris(hydroxymethyl)aminomethane)

## Section 12. Ecological Information

<i>Toxicity of the Products of Biodegradation</i>	1) ImmunoPure Plus Immobilized Protein G	Not available.
	2) Non-Reducing Lane Marker Sample Buffer	The products of degradation are more toxic than the product itself.
	3) BupH Tris Buffered Saline Packs	The products of degradation are more toxic than the product itself.
	4) BupH Packs Dulbecco's PBS Buffer Packs	Not available.
	5) ImmunoPure IgG Elution Buffer	The product itself and its products of degradation are not toxic.
	6) B-PER® Bacterial Protein Extraction Reagent, 25 ml	The product itself and its products of degradation are not toxic.
	7) DSS	The product itself and its products of degradation are not toxic.
	8) Spin X Tubes with White Underivatized Filter Paper	Not available.
	9) Dolphin Tubes	Not available.

## 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 Pierce for all transport information.*

## Section 15. Regulatory Information

*HCS Classification* CLASS: Irritating substance.  
CLASS: Target organ effects.

*U.S. Federal Regulations* TSCA 8(b) inventory: Agarose; Sodium Azide; Tris hydrochloride; SDS; Glycerol; Pierce Tracking Dye; Tris(hydroxymethyl)aminomethane; Sodium Chloride; Elution Buffer Ingredient 1; Elution Buffer Ingredient 2; Elution Buffer Ingredient 3; B-PER® Bacterial Protein Extraction Reagent Ingredient 2  
TSCA 8(d) H and S data reporting: Sodium Azide; SDS; Glycerol; Elution Buffer Ingredient 1; B-PER® Bacterial Protein Extraction Reagent Ingredient 2  
SARA 302/304/311/312 extremely hazardous substances: Sodium Azide; Elution Buffer Ingredient 1; B-PER® Bacterial Protein Extraction Reagent Ingredient 2  
SARA 302/304 emergency planning and notification: Sodium Azide; Elution Buffer Ingredient 1; B-PER® Bacterial Protein Extraction Reagent Ingredient 2  
SARA 302/304/311/312 hazardous chemicals: Sodium Azide; SDS; Glycerol; Elution Buffer Ingredient 1; Strong base; B-PER® Bacterial Protein Extraction Reagent Ingredient 2  
SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Sodium Azide: immediate health hazard; SDS: immediate health hazard, delayed health hazard; Glycerol: immediate health hazard, delayed health hazard; Elution Buffer Ingredient 1: immediate health hazard, delayed health hazard; Strong base: immediate health hazard; B-PER® Bacterial Protein Extraction Reagent Ingredient 2: immediate health hazard, delayed health hazard

Clean Water Act (CWA) 307: No products were found.

Clean Water Act (CWA) 311: Elution Buffer Ingredient 1; Strong base; B-PER® Bacterial Protein Extraction Reagent Ingredient 2

Clean air act (CAA) 112 accidental release prevention: Elution Buffer Ingredient 1; B-PER® Bacterial Protein Extraction Reagent Ingredient 2

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

Clean air act (CAA) 112 regulated toxic substances: Elution Buffer Ingredient 1; B-PER® Bacterial Protein Extraction Reagent Ingredient 2

*WHMIS (Canada)* CLASS D-2A: Material causing other toxic effects (VERY TOXIC).

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CEPA DSL: Agarose; Sodium Azide; Tris hydrochloride; SDS; Glycerol; Pierce Tracking Dye; Tris(hydroxymethyl)aminomethane; Elution Buffer Ingredient 1; Elution Buffer Ingredient 2; Strong base; B-PER® Bacterial Protein Extraction Reagent Ingredient 2

CEPA NDSL: Sodium Azide

*International Regulations*

EINECS Not available.

DSCL (EEC) R36/37/38- Irritating to eyes, respiratory system and skin.

*International Lists* Australia (NICNAS): Agarose; Sodium Azide; Tris hydrochloride; SDS; Glycerol; Pierce Tracking Dye; Milli-Q Water; Tris(hydroxymethyl)aminomethane; Elution Buffer Ingredient 1; Strong base; B-PER® Bacterial Protein Extraction Reagent Ingredient 2

Korea (TCCL): Agarose; Sodium Azide; Tris hydrochloride; SDS; Glycerol; Pierce Tracking Dye; Milli-Q Water; Tris(hydroxymethyl)aminomethane; Elution Buffer Ingredient 1; Strong base; B-PER® Bacterial Protein Extraction Reagent Ingredient 2

Philippines (RA6969): Agarose; Sodium Azide; Tris hydrochloride; SDS; Glycerol; Milli-Q Water; Tris(hydroxymethyl)aminomethane; Elution Buffer Ingredient 1; Strong base; B-PER® Bacterial Protein Extraction Reagent Ingredient 2

*State Regulations* Pennsylvania RTK: Sodium Azide: (environmental hazard, generic environmental hazard); Glycerol: (generic environmental hazard); Elution Buffer Ingredient 1: (environmental hazard); Strong base: (environmental hazard, generic environmental hazard); B-PER® Bacterial Protein Extraction Reagent Ingredient 2: (environmental hazard)  
 Florida: Sodium Azide  
 Minnesota: Sodium Azide  
 Massachusetts RTK: Sodium Azide; Glycerol; Elution Buffer Ingredient 1; Strong base; B-PER® Bacterial Protein Extraction Reagent Ingredient 2  
 New Jersey: Sodium Azide; Elution Buffer Ingredient 1; Strong base; B-PER® Bacterial Protein Extraction Reagent Ingredient 2  
 California prop. 65: No products were found.

**Section 16. Other Information**

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

Health	*	1
Fire Hazard		1
Reactivity		1
Personal Protection		h

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



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