

# Independent Forensics of Illinois

Material Safety Data Sheet

Date Updated: 06/05/2006

## RSID Extraction Buffer (Phosphate Buffered Saline)

### SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**MSDS Name:** Phosphate Buffered Saline (PBS)

**Synonyms:** None.

**Company Identification:**

Independent Forensics

4600 W. Roosevelt Rd

Hillside, IL 60162

**For information, call:** 1-866-434-2400

### Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	SARA 313
None	Phosphate Buffer		
7647-14-5	Sodium Chloride	80.0 %	No
7447-40-7	Potassium chloride	2.0%	No
26628-22-8	Sodium Azide	.01	Yes

### SECTION 3 - HAZARDS IDENTIFICATION

#### **Emergency Overview**

**Appearance:** clear liquid

**Warning!** Causes eye irritation. May cause skin and respiratory tract irritation.

This product contains sodium azide, which has been classified as harmful in the concentration range of 0.1-1.0%. When disposing of this reagent through lead or copper plumbing, flush with copious volumes of water to prevent azide build-up in drains.

**Target Organs:** Eyes.

#### **Potential Health Effects**

**Eye:** Causes eye irritation.

**Skin:** May cause skin irritation.

**Ingestion:** Ingestion of large amounts may cause gastrointestinal irritation. May cause gastric disturbances and electrolytic imbalance. Ingestion of large amounts of sodium chloride may cause nausea, vomiting, rigidity or convulsions. Continued exposure can produce coma, dehydration and internal organ congestion.

**Chronic:** No information found.

#### **SECTION 4 - FIRST AID MEASURES**

**Eyes:** Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

**Skin:** Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. Wash clothing before reuse.

**Ingestion:** Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid.

**Notes to Physician:** Treat symptomatically and supportively.

#### **SECTION 5 - FIRE FIGHTING MEASURES**

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Substance is noncombustible.

**Extinguishing Media:** Use water spray, dry chemical, carbon dioxide, or chemical foam.

**Flash Point:** Not applicable.

**Autoignition Temperature:** Not applicable.

**Explosion Limits, Lower:** Not available.

**Upper:** Not available.

**NFPA Rating:** (estimated) Health: 2; Flammability: 0; Instability: 0

#### **SECTION 6 - ACCIDENTAL RELEASE MEASURES**

**General Information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:** Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation.

#### **SECTION 7 - HANDLING AND STORAGE**

**Handling:** Wash thoroughly after handling. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation.

**Storage:** Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

#### **SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION**

**Engineering Controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

**Exposure Limits**

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Sodium Chloride	none listed	none listed	none listed
Sodium phosphate, dibasic	none listed	none listed	none listed
Potassium phosphate, Monobasic	none listed	none listed	none listed
Potassium chloride	none listed	none listed	none listed

**OSHA Vacated PELs:** Sodium Chloride: No OSHA Vacated PELs are listed for this chemical. Sodium phosphate, dibasic: No OSHA Vacated PELs are listed for this chemical. Potassium phosphate, Monobasic: No OSHA Vacated PELs are listed for this chemical. Potassium chloride: No OSHA Vacated PELs are listed for this chemical.

**Personal Protective Equipment**

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin:** Wear appropriate protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

**Physical State:** liquid

**Appearance:** clear

**Odor:** none reported

**pH:** 7.2-7.6 at 25°C

**Vapor Pressure:** Not available.

**Vapor Density:** Not available.

**Evaporation Rate:** Not available.

**Viscosity:** Not available.

**Boiling Point:** Not available.

**Freezing/Melting Point:** Not available.

**Decomposition Temperature:** Not available.

**Solubility:** Soluble.

**Specific Gravity/Density:** Not available.

**Molecular Formula:** Mixture

**Molecular Weight:** Not available.

## SECTION 10 - STABILITY AND REACTIVITY

**Chemical Stability:** Stable.

**Materials to Avoid:** Strong oxidizing agents, Strong acids.

**Hazardous Decomposition Products:** Nature of decomposition products not yet known.

**Hazardous Polymerization:** Will not occur.

## SECTION 11 - TOXICOLOGICAL INFORMATION

**Skin contact:** May cause skin irritation.

**Skin absorption:** May be harmful if absorbed through the skin.

**Eye contact:** May cause eye irritation.

**Ingestion:** May be harmful if swallowed.

## SECTION 12 - ECOLOGICAL INFORMATION

No information available.

## SECTION 13 - DISPOSAL CONSIDERATIONS

Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

## SECTION 14 - TRANSPORT INFORMATION

	US DOT	Canada TDG
<b>Shipping Name:</b>	Not regulated as a hazardous material	No information available.
<b>Hazard Class:</b>		
<b>UN Number:</b>		
<b>Packing Group:</b>		

## SECTION 15 - REGULATORY INFORMATION

### **United States Regulatory Information**

**SARA Listed:** No

### **Canada Regulatory Information**

#### **WHMIS classification:**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

**DSL:** No

**NDSL:** No

**SECTION 16 - ADDITIONAL INFORMATION**

**Disclaimer:** For laboratory use only. Not for drug, household, or other uses.

**Warranty:** The above information is believed to be correct but is not all inclusive and should only be used as a guide. Independent Forensics of Illinois is not liable for damage resulting from the handling of the above product.