

# MATERIAL SAFETY DATA SHEET



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

## 1. Chemical Product and Company Identification

**Product Name:** ProtoGel Stacking Buffer

**Product Number:** EC-893

### Chemical Names/

#### Description:

Aqueous solution of tris base and sodium dodecyl sulfate.

### Manufacturer

National Diagnostics  
305 Patton Drive  
Atlanta, GA 30336

### Telephone Numbers

(800) 526-3867  
(404) 699-2121

### Emergency Numbers

#### Chemtrec

**(800) 424-9300 (U.S. & Canada)**  
**01-703-527-3887 (outside U.S. & Canada)**

## 2. Composition/Information on Ingredients

Component	% Comp.	CAS #	EINECS #	TLV (Units)
Tris-Base	6	77-86-1	201-064-4	none established
SDS		151-21-3	205-788-1	

## 3. Hazards Identification

### Appearance and Odor

Clear, colorless solution.

#### **EMERGENCY OVERVIEW - IMMEDIATE HAZARD**

CAUSES IRRITATION TO SKIN, EYES, AND RESPIRATORY TRACT. HARMFUL IF SWALLOWED OR INHALED.

#### **EMERGENCY OVERVIEW - CHRONIC HAZARD WARNING:**

CHRONIC DERMATITIS MAY FOLLOW SKIN CONTACT.

### Potential Health Effects

#### Inhalation

Causes irritation to the respiratory tract.

#### Ingestion

Causes irritation and reddening to the mucous membranes of the mouth, esophagus, and gastrointestinal tract.

**Skin**

Causes irritation to the skin.

**Eyes**

Causes irritation to the eyes.

**Signs and Symptoms of Overexposure****Inhalation**

Coughing, shortness of breath.

**Ingestion**

Symptoms may include nausea, vomiting, and diarrhea. Large oral doses may cause weakness, collapse, blood clotting, and coma. The estimated lethal dose of Tris Base is 50 grams dry solid.

**Skin**

Redness, itching, and pain.

**Eyes**

Redness, itching, and pain.

**Carcinogenicity**

Not listed as a carcinogen by NTP or IARC.

**Mutagenicity**

No information found.

**Reproductive Toxicity**

No information found.

**Teratogenic Effects**

No information found.

**Routes of Entry**

Ingestion.

**Target Organ Statement**

No information available.

**4. First Aid Measures****Inhalation**

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

**Ingestion**

Do not induce vomiting. If swallowed and the person is conscious, immediately give large amounts of water. Get medical attention.

**Skin**

Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.

**Eyes**

Immediately flush eyes with plenty of water for at least fifteen minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

**5. Fire Fighting Measures**

Flash Point	N.A.	Flammable Limits	N.A.
Flash Point Method	N.A.	Autoignition temperature	N.A.

### **Extinguishing media**

Use media appropriate to the primary cause of fire.

### **Protective Equipment**

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

### **Hazardous Combustion Products**

Thermal decomposition products may include toxic oxides of nitrogen, sulfur, and carbon.

### **Unusual Fire and Explosion Hazards**

N.A.

NFPA Codes: Health 1 Flammability 0 Reactivity 0

## **6. Accidental Release Measures**

### **Steps to be taken in case material is released or spilled**

Contain and clean up spill immediately, prevent from entering floor drains. Contain liquids using absorbents. Shovel all spill materials into disposal drum. Scrub spill area with detergent, flush with copious amounts of water.

### **Waste Disposal Method**

Disposal must be made in accordance with applicable federal, state, and local regulations.

### **Personal Precautions**

Wear appropriate protective equipment as specified in section 8.

## **7. Handling and Storage**

### **Handling**

Avoid contact and inhalation. Do not get in eyes, on skin, on clothing. Wash thoroughly after handling.

### **Storage**

Keep in a tightly closed container, stored in a cooled, dry, ventilated area.

### **Storage Temperature**

Room Temperature

### **Disposal**

Observe all national, state, and local regulations regarding disposal.

## **8. Exposure Controls/Personal Protection**

### **Airborne Exposure Limits**

Component: Tris-Base

ACGIH Threshold Limit Value (TLV): none established

OSHA Permissible Exposure Limit (PEL): none established

### **Engineering Controls**

A system of local and/or general exhaust is recommended to keep employee exposures low. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source.

### **Respiratory Protection**

For conditions of use where exposure to the mist is apparent, a full-face dust/mist respirator may be worn. For emergencies or instances where the exposure levels are not known, use a full-face positive-pressure, air-supplied respirator.

## Eye Protection

Use chemical safety goggles and/or a full face shield where splashing is possible. Maintain eye wash fountain and quick-drench facilities in work area.

## Skin Protection

Wear protective gloves and clean body covering clothing.

## Other Control Measures

N.A.

## 9. Physical Properties

<b>Boiling point</b>	220 F	<b>Evaporation Rate</b>	Water
<b>Melting point</b>	N.A.	<b>Solubility in water</b>	Soluble
<b>Vapor pressure (mmHg)</b>	Water	<b>pH</b>	8.8
<b>Vapor density (Air = 1)</b>	N.A.	<b>Specific gravity (H2O = 1)</b>	1.16
<b>% volatile by volume</b>	81		

## 10. Stability and Reactivity

### Stability

Stable under ordinary conditions of use and storage.

### Conditions to Avoid

Incompatibles.

### Hazardous Decomposition Products

Oxides of nitrogen, sulfur, and carbon may be produced upon burning.

### Hazardous Polymerization

Will not occur

### Incompatibles

Tris-Base:

No incompatibility data found.

SDS:

Strong oxidizers, acids.

## 11. Toxicological Information

### Product LD50 Values

ProtoGel Stacking Buffer	Oral Rat LD50 (mg/kg):	98333
ProtoGel Stacking Buffer	Dermal Rabbit LD50 (mg/kg):	No Data

### Component Cancer List Status

NTP Carcinogen

	Known	Anticipated	IARC Category
Tris-Base	No	No	None
SDS	No	No	None

## 12. Ecological Information

### Tris-Base

No information found on either the environmental fate or environmental toxicity of this material.

### SDS

No information found.

## 13. Disposal Considerations

Observe all national, state, and local regulations regarding disposal.

## 14. Transport Information

### D.O.T.

Proper Shipping Name: Not Regulated.

Hazard Class: N.A.

UN Number: N.A.

Packing Group: N.A.

### I.A.T.A.

Proper Shipping Name: Not Regulated

Hazard Class: N.A.

UN Number: N.A.

Packing Group: N.A.

### I.M.O.

Proper Shipping Name: Not Regulated.

Hazard Class: N.A.

UN Number: N.A.

Packing Group: N.A.

## 15. Regulatory Information

### United States

#### TSCA Regulatory Statement

All intentional ingredients are listed on the TSCA Inventory.

#### SARA 311/312 Hazard Categories

Component	Fire	Pressure	Reactivity	Acute	Chronic
Tris-Base	No	No	No	Yes	No
SDS	No	No	No	Yes	Yes

### Europe

#### EEC Regulatory

All intentional ingredients are listed on the European EINECS Inventory.

## 16. Other Information

**NFPA Codes:    Health 1    Flammability 0    Reactivity 0**

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