

# MATERIAL SAFETY DATA SHEET



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

## 1. Chemical Product and Company Identification

**Product Name:** TTE Glycerol Tolerant Buffer 20X

**Product Number:** EC-871

### Chemical Names/

#### Description:

Buffered aqueous solution of Tris base, taurine and EDTA.

### 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 #
Tris-Base	22	77-86-1	201-064-4

### 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 and carbon.

### Unusual Fire and Explosion Hazards

Not considered an explosion hazard.

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 below the Airborn Exposure Limits. 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 dust or 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>	1.0
<b>Melting point</b>	N.A.	<b>Solubility in water</b>	Soluble
<b>Vapor pressure (mmHg)</b>	Water	<b>pH</b>	9.2

**Vapor density (Air = 1)** N.A.  
**% volatile by volume** 71

**Specific gravity (H<sub>2</sub>O = 1)** 1.16

## 10. Stability and Reactivity

### Stability

Stable under ordinary conditions of use and storage. If moisture is present, boric acid can be corrosive to iron.

### Conditions to Avoid

Heat, incompatibles.

### Hazardous Decomposition Products

Boric acid loses chemically combined water upon heating, forming metaboric acid (HBO<sub>2</sub>) at 212 - 221F, then pyroboric acid (H<sub>2</sub>B<sub>4</sub>O<sub>7</sub>) at 285 - 320F, and boric anhydride at higher temperatures. The burning of Tris Base may produce carbon monoxide, carbon dioxide, and nitrogen oxides.

### Hazardous Polymerization

Will not occur

### Incompatibles

Tris-Base:

No incompatibility data found.

Taurine:

No information found.

Ethylenediaminetetraacetic acid, disodium salt dihydrate:

Oxidizing agents.

## 11. Toxicological Information

### Product LD50 Values

TTE Glycerol Tolerant Buffer 20X Oral Rat LD50 (mg/kg): 26818

TTE Glycerol Tolerant Buffer 20X Dermal Rabbit LD50 (mg/kg):

### Component Cancer List Status

	NTP Carcinogen		IARC Category
	Known	Anticipated	
Tris-Base	No	No	None
Taurine	No	No	None
Ethylenediaminetetraacetic acid, disodium salt dihydrate	No	No	None

## 12. Ecological Information

### Tris-Base

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

**Taurine**

No information found.

**Ethylenediaminetetraacetic acid, disodium salt dihydrate**

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

**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
Taurine	No	No	No	Yes	No
Ethylenediaminetetraacetic acid, disodium salt dihydrate	No	No	No	Yes	No

**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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