

# SAFETY DATA SHEET



Conforms to regulation (EC) no. EU 453/2010

## SECTION 1 - IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1 Product Identifier

**Product Name:** 10X ProtoBlot Rapid Western Transfer Buffer

**Product Number:** EC-878

### 1.2 Relevant Identified Uses of the Substance/Mixture and Uses Advised Against

Investigational research by professional users

### 1.3 Details of the Supplier of the Safety Data Sheet

#### Manufacturer

National Diagnostics  
305 Patton Drive  
Atlanta, GA 30036  
(404) 699-2121  
(800) 526-3867  
info@nationaldiagnostics.com

### 1.4 Emergency Telephone Number

#### ChemTel Inc.

Contract number MIS8894340  
1-800 255-3924 (United States, Canada, Puerto Rico & US Virgin Islands)  
01-800-099-0731 (Mexico)  
400-120-0751 (China)  
000-800-100-4086 (India)  
1-300-954-583 (Australia)  
0-800-591-6042 (Brazil)  
+1-813-255-3924 (All other regions)

## SECTION 2 - HAZARDS IDENTIFICATION

### 2.1 Classification of the Substance or Mixture

Not a hazardous substance or mixture according to regulation (EC) No. 1272/2008.

### 2.2 Label Elements

This product has no labeling elements associated with EC directives or respective national laws.

### 2.3 Other Hazards

None found.

## SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2 Mixture

#### Chemical Names/Description

Odorless, colorless solution

#### Component List

Component	% Comp.	CAS #	EC #	1278/2008 Classification
Imidazole	3.35	288-32-4	206-019-2	N.A.

## SECTION 4 - FIRST AID MEASURES

### 4.1 Description of First Aid Measures

#### Inhalation

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

#### Ingestion

Induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Call a physician.

#### 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.

### 4.2 Most Important Symptoms and Effects, Both Acute and Delayed

### **Inhalation**

Symptoms may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea and vomiting.

### **Ingestion**

Can cause sore throat, vomiting, or diarrhea.

### **Skin**

Symptoms of redness, pain, and severe burn can occur.

### **Eyes**

Can cause blurred vision, redness, pain, severe tissue burns and eye damage.

## **4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed**

Unknown/not applicable

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

### **5.1 Extinguishing media**

Use media appropriate to the primary cause of fire.

### **5.2 Special Hazards Arising from the Substance/Mixture**

#### **Hazardous Combustion Products**

N.A.

#### **Hazardous Decomposition Products**

No dangerous decomposition product known.

#### **Hazardous Polymerization**

Will not occur under normal conditions of use (See Sections 10.4 & 10.5).

### **5.3 Advice for Firefighters**

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.

### **5.4 Further Information**

No data available.

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

### **6.1 Personal Precautions**

Wear appropriate protective equipment as specified in Section 8.

### **6.2 Environmental Precautions**

Prevent discharge into the environment. Dike spills and stop leakage where practical. Do not allow material to enter drains.

### **6.3 Methods and Materials for Containment and Cleaning Up**

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.

### **6.4 References to Other Sections**

For disposal information, see Section 13. For protective clothing and equipment, see Section 8.

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

### **7.1 Precautions for Safe Handling**

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

### **7.2 Conditions for Safe Storage (including any incompatibles)**

Keep in a tightly closed container, stored in a cooled, dry, ventilated area away from sources of heat or ignition. Protect from physical damage. Isolate from incompatible materials (section 10).

#### **Incompatibles**

Strong oxidizers

### **7.3 Specific End Uses**

Investigational research by professional users

## **SECTION 8 - EXPOSURE CONTROLS/PERSONAL PRECAUTIONS**

### **8.1 Control Parameters**

ACGIH Threshold Limit Value (TLV): none established

OSHA Permissible Exposure Limit (PEL): none established

## 8.2 Exposure Controls

### Engineering Controls

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne 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.

## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on Basic Physical & Chemical Properties

a. Appearance	Colorless solution	b. Odor	Odorless
c. Odor Threshold	N.A.	d. pH	No Data
e. Melting/Freezing Point (°C)	0	f. Boiling point (°C)	100
g. Flash Point (°C)	N.A.	h. Evaporation Rate	No Data
i. Flammability	N.A.	j. Upper/Lower Flammability or Explosive Limits	N.A.
k. Vapor Pressure	23 @ 20 C	l. Vapor Density (Air = 1)	1.391 @ 20 C
m. Relative Density	No Data	n. Water Solubility	Fully miscible
o. Partition Coefficient n-octanol/water	Mixture	p. Autoignition Temperature (°C)	N.A.
q. Decomposition Temperature (°C)	N.A.	r. Viscosity	No data available.
s. Explosive Properties	N.A.	t. Oxidizing Properties	N.A.

## SECTION 10 - STABILITY AND REACTIVITY

### 10.1 Reactivity

Not reactive under recommended conditions of use and storage.

### 10.2 Chemical Stability

Stable under ordinary conditions of use and storage.

### 10.3 Possibility of Hazardous Reactions

Will not occur under normal conditions of use (See Sections 10.4 & 10.5).

### 10.4 Conditions to Avoid

No dangerous reactions known

### 10.5 Incompatible Materials

Strong oxidizers

### 10.6 Hazardous Decomposition Products

No dangerous decomposition product known.

## SECTION 11 - TOXICOLOGICAL INFORMATION

### Product LD50 Values

#### Oral Rat LD50 (mg/kg)

4183

#### Dermal Rabbit LD50 (mg/kg)

### Component Cancer List Status

	NTP Carcinogen		IARC Category
	Known	Anticipated	
Imidazole	No	No	None

### Potential Health Effects

#### Inhalation

Extremely destructive to tissues of the mucous membranes and upper respiratory tract.

**Ingestion**

Corrosive. Swallowing can cause severe burns of the mouth, throat, and stomach, leading to death.

**Skin**

Corrosive.

**Eyes**

Corrosive. Can cause blindness.

**Carcinogenicity**

Not listed as a known or anticipated carcinogen by NTP or IARC.

**Mutagenicity**

No information found.

**Reproductive Toxicity**

No information found.

**Teratogenic Effects**

No information found.

**Routes of Entry**

No information found.

**Target Organ Statement**

No information found.

**SECTION 12 - ECOLOGICAL INFORMATION****12.1 Toxicity**

	<b>Vertebrates</b>	<b>Invertebrates</b>	<b>Algae</b>	<b>Microorganisms</b>
Aquatic Toxicity (ppm unless otherwise noted)	No data	No data	No data	No data
	<b>Birds</b>	<b>Arthropods</b>	<b>Plants</b>	<b>Microorganisms</b>
Terrestrial Environment Toxicity (ppm unless otherwise noted)	No data	No data	No data	No data

**12.2 Persistence and Degradability**

No data

**12.3 Bioaccumulative Potential**

No data

**12.4 Mobility in Soil**

No data

**12.5 Results of PBT and vPvB Assessment**

No data

**12.6 Other Adverse Effects**

None

**SECTION 13 - DISPOSAL CONSIDERATIONS****13.1 Waste Treatment Methods**

Offer surplus or non-recyclable product to licensed disposal company. Disposal is subject to user compliance with applicable law and product characteristics at time of disposal. Dispose of packaging as product.

**SECTION 14 - TRANSPORT INFORMATION**

	<b>ADR/RID</b>	<b>IATA</b>	<b>IMO</b>	<b>DOT</b>
<b>14.1 UN Number</b>	N.A.	N.A.	N.A.	N.A.
<b>14.2 Shipping Name</b>	Not Regulated	Not Regulated	Not Regulated	Not Regulated
<b>14.3 Hazard Class</b>	N.A.	N.A.	N.A.	N.A.
<b>14.4 Packing Group</b>	N.A.	N.A.	N.A.	N.A.
<b>14.5 Environmental Hazards</b>	N.A.	N.A.	N.A.	N.A.
<b>14.6 Special Precautions</b>	N.A.	N.A.	N.A.	N.A.

**SECTION 15 - REGULATORY INFORMATION****15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance/Mixture**

**United States****TSCA Regulatory Statement**

All intentional ingredients are listed on the TSCA Inventory.

**SARA 311/312 Hazard Categories**

<b>Component</b>	<b>Fire</b>	<b>Pressure</b>	<b>Reactivity</b>	<b>Acute</b>	<b>Chronic</b>
Imidazole	No	No	No	Yes	Yes

**Europe****EEC Regulatory**

All intentional ingredients are listed on the European EINECS Inventory.

**SECTION 16 - OTHER INFORMATION****Revisional Updates**

4/26/2019 - Updated Section 1.4

5/29/2015 - Updated Sections 2.1 and 3.2

4/16/2013 - Released Version 1.0

**NFPA Codes**

Health 1 Flammability 1 Reactivity 0

**Dangers**

Imidazole

None

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