# 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: ProtoGel Sample Prep Kit - Reagent A

Product Number: EC-884A

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

Classification according to Regulation (EC) No. 1272/2008 [EU-GHS/CLP]

H315 - Skin Corrosion/Irritation (Category 2)

- H318 Serious Eye Damage/Eye Irritation (Category 1)
- H400 Acute Hazards to the Aquatic Environment (Category 1)

## 2.2 Label Elements GHS LABEL ELEMENTS AND CLASSIFICATION GHS Label Elements

## DANGER

- H315 Causes skin irritation.
  - H318 Causes serious eye damage.
  - H400 Very toxic to aquatic life.
  - P273 Avoid release to the environment.

P280 - Wear protective gloves/protective clothing/eye protection/face protection. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

## 2.3 Other Hazards

None found.

## **SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS**

## 3.2 Mixture

Chemical Names/Description

Solution of Proprietary Ammonium Salt

## **Component List**

Component	% Comp.	CAS #	EC #	1278/2008 Classification
Proprietary Ammonium Salt	25			H315, H318, H400
Water	75	7732-18-5	231-791-2	N.A.

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

## 4.1 Description of First Aid Measures

#### Inhalation

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

## Ingestion

If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical aid.

#### Skin

In case of contact, flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical aid if irritation develops and persists. Wash clothing before reuse.

## Eyes

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical aid immediately.

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

#### Inhalation

**Proprietary Ammonium Salt:** Coughing, shortness of breath.

#### Water:

No information found.

#### Ingestion

**Proprietary Ammonium Salt:** Nausea, vomiting, diarrhea.

#### Water:

No information found.

#### Skin

**Proprietary Ammonium Salt:** Symptoms include redness, itching, and pain.

Water:

No information found.

## Eyes

**Proprietary Ammonium Salt:** Redness, itching and pain.

Water:

No information found.

## **4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed** Unknown/not applicable

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

## 5.1 Extinguishing media

Not applicable.

## 5.2 Special Hazards Arising from the Substance/Mixture

Hazardous Combustion Products Not applicable.

## **Hazardous Decomposition Products**

Hydrogen chloride, nitrogen oxides, carbon monoxide, carbon dioxide.

#### **Hazardous Polymerization**

Will not occur.

## 5.3 Advice for Firefighters

Not applicable.

## **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.

## Incompatibles

## **Proprietary Ammonium Salt:**

Strong oxidizing agents.

## Water:

No incompatibility data found.

## 7.3 Specific End Uses

Investigational research by professional users

## SECTION 8 - EXPOSURE CONTROLS/PERSONAL PRECAUTIONS

## **8.1 Control Parameters**

## **Component: Proprietary Ammonium Salt**

ACGIH Threshold Limit Value (TLV): none listed

OSHA Permissable Exposure Limit (PEL): none listed

## **Component: Water**

ACGIH Threshold Limit Value (TLV): None established

OSHA Permissable 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 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 substance is apparent, consult an insutrial hygenist. For emergencies or instances where the exposure levels are not known use a full-facepiece 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	Aqueous Solution	b. Odor	None
c. Odor Threshold	N.A.	d. pH	Not available.
e. Melting/Freezing Point (°C)	0	f. Boiling point ( <sup>o</sup> C)	100
g. Flash Point ( <sup>o</sup> C)	N.A.	h. Evaporation Rate	Not available.
i. Flammability	N.A.	j. Upper/Lower Flammability or Explosive Limits	N.A.
k. Vapor Pressure	Not available.	I. Vapor Density (Air = 1)	Not available.
m. Relative Density	Not available.	n. Water Solubility	Soluble
o. Partition Coefficient n-octanol/water	Mixture	p. Autoignition Temperature (°C)	N.A.
q. Decomposition Temperature ( <sup>o</sup> C)	Not applicable.	r. Viscosity	No data available.
s. Explosive Properties	N.A.	t. Oxidizing Properties	Not an oxidizer

## **SECTION 10 - STABILITY AND REACTIVITY**

## 10.1 Reactivity

May react with aldehydes, acid chlorides.

## **10.2 Chemical Stability**

Stable at room temperature in closed containers under nomral storage and handling conditions.

## **10.3 Possibility of Hazardous Reactions**

Will not occur.

## **10.4 Conditions to Avoid**

Excess heat.

## **10.5 Incompatible Materials**

**Proprietary Ammonium Salt:** 

Strong oxidizing agents.

#### Water:

No incompatibility data found.

## **10.6 Hazardous Decomposition Products**

Hydrogen chloride, nitrogen oxides, carbon monoxide, carbon dioxide.

## **SECTION 11 - TOXICOLOGICAL INFORMATION**

## Product LD50 Values

Oral Rat LD50 (mg/kg) No Data

Dermal Rabbit LD50 (mg/kg) 4300 uL/kg/24H

## **Component Cancer List Status**

	Known	Anticipated	IARC Category	
Proprietary Ammonium Salt	No	No	None	
Water	No	No	None	

## **Potential Health Effects**

## Inhalation

Proprietary Ammonium Salt

Causes irritation to the respiratory tract.

## Water

No information found.

## Ingestion

#### Proprietary Ammonium Salt

Harmful if swallowed. Specific health effects from ingestion unknown. May cause irritation to the gastrointestinal tract.

#### Water

No information found.

## Skin

**Proprietary Ammonium Salt** Causes irritation to skin.

#### Water

No information found.

## Eyes

Proprietary Ammonium Salt Causes severe irritation to eyes. May cause corneal damage.

#### Water

No information found.

## Carcinogenicity

Proprietary Ammonium Salt

Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA

## Water

No information available.

## **Mutagenicity**

**Proprietary Ammonium Salt** No information available.

#### Water

No information available.

## **Reproductive Toxicity**

**Proprietary Ammonium Salt** No information available.

Water No information available.

## **Teratogenic Effects**

**Proprietary Ammonium Salt** No information available.

Water No information available.

## **Routes of Entry**

**Proprietary Ammonium Salt** No information available.

Water No information available

## **Target Organ Statement**

**Proprietary Ammonium Salt** No information available.

#### Water No information available

## **SECTION 12 - ECOLOGICAL INFOMATION**

## 12.1 Toxicity

## **COMPONENT: Proprietary Ammonium Salt**

	Vertebrates	Invertebrates	Algae	Microorganisms
Aquatic Toxicity (ppm unless otherwise noted)	LC50 (96 hr, zebrafish) 0.7-1.0 mg/L	EC50 (48hr, Daphnia) 0.28mg/L	EC50 (96 hrs) 0.1mg/L	EC50 (16hrs) 0.96mg/L
	Birds	Arthropods	Plants	Microorganisms
Terrestrial Environment Toxicity (ppm unless otherwise noted)	No data	No Data	EC50 (16day, S. alba) 537mg/kg soil	EC50 (28 day) >1000mg/kg soil
COMPONENT: Water	Vertebrates	Invertebrates	Algae	Microorganisms
Aquatic Toxicity (ppm unless otherwise noted)	No data	No data	No data	No data
	Birds	Arthropods	Plants	Microorganisms
Terrestrial Environment Toxicity (ppm unless otherwise noted)	No data	No data	No data	No data

## 12.2 Persistence and Degradability

Proprietary Ammonium Salt

Readily biodegradable (92% at 28 days)

Water

No data

## **12.3 Bioaccumulative Potential**

Proprietary Ammonium Salt Log BCF: 1.85

## Water

No data

## 12.4 Mobility in Soil

Proprietary Ammonium Salt likely to be immobile in soil

## Water

No data

## 12.5 Results of PBT and vPvB Assessment

Proprietary Ammonium Salt Not PBT or vPvB

Water No data

## **12.6 Other Adverse Effects**

Proprietary Ammonium Salt None

Water 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

## **SECTION 14 - TRANSPORT INFORMATION**

	ADR/RID	IATA	IMO	DOT
<b>14.1 UN Number</b> 3082		3082	3082	N.A.
14.2 Shipping Name	Environmentally hazardous substance, liquid, N.O.S.	Environmentally hazardous substance, liquid, N.O.S	Environmentally hazardous substance, liquid, N.O.S.	Not Regulated
14.3 Hazard Class	9	9	9	N.A.
14.4 Packing Group	III	III	III	N.A.
14.5 Environmental Hazards	N.A.	N.A.	Not regulated	N.A.
14.6 Special Precautions	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

Component	Fire	Pressure	Reactivity	Acute	Chronic
Proprietary Ammonium Salt	No	No	No	No	No
Water	No	No	No	No	No

## Europe

**EEC Regulatory** 

All intentional ingredients are listed on the European EINECS Inventory.

## **SECTION 16 - OTHER INFORMATION**

## **Revisional Updates**

8/8/2023 - Updated Section 14.5 4/26/2019 - Updated Section 1.4 5/29/2015 - Updated Sections 2.1 and 3.1

8/12/2013 - Released Version 1.0

## **NFPA Codes**

Health 3 Flammability 0 Reactivity 0

## Dangers

Proprietary Ammonium Salt

H315 - Causes skin irritation.

H318 - Causes serious eye damage.

H400 - Very toxic to aquatic life.

Water None

**MANUFACTURER DISCLAIMER:** The information given herein is offered in good faith as accurate, but without guarantee. Conditions of the use and suitability of the product for particular uses are beyond our control. All risks of use of the product are therefore assumed by the user. Nothing is intended as a recommendation for uses which infringe valid patents or as extending license under valid patents. Appropriate warnings and safe handling procedures should be provided to handlers and users.