

# MATERIAL SAFETY DATA SHEET For DNA/RNA Preparation Kit

[ExiPrep™ DX Bacteria Genomic DNA Kit](#)  
[ExiPrep™ Dx Mycobacteria Genomic DNA Kit](#)  
[ExiPrep™ DX Blood Genomic DNA Kit](#)  
[ExiPrep™ DX Viral RNA Kit](#)  
[ExiPrep™ DX Viral DNA Kit](#)  
[ExiPrep™ DX Viral DNA/RNA Kit](#)

## 1. PRODUCT AND COMPANY INFORMATION

- Product Name: Same as mentioned upper side.  
Product Use: For research use only  
Not intended for human or animal diagnostics, therapeutic or other clinical uses, unless otherwise stated.
- Company : Bioneer corporation  
8-11,Munpyeongseo-ro,Daedeok-gu,Daejeon 306-220,Republic of Korea  
Tel.: +82-42-930-8777

## ● EDTA (ETHYLENEDIAMINETETRAACETIC ACID)

## 2. HAZARDS IDENTIFICATION

LABEL PRECAUTIONARY STATEMENTS

IRRITANT

IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN.

IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE.

WEAR SUITABLE PROTECTIVE CLOTHING.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS #: 60-00-4

MF: C10H16N2O8

EC NO: 200-449-4

DO NOT CONTAIN ANY ANIMAL PRODUCTS.

## 4. FIRST-AID MEASURES

IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES.

IN CASE OF CONTACT, IMMEDIATELY WASH SKIN WITH SOAP AND COPIOUS AMOUNTS OF WATER.

IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN.

IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS. CALL A PHYSICIAN.

WASH CONTAMINATED CLOTHING BEFORE REUSE.

## 5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

WATER SPRAY.

CARBON DIOXIDE, DRY CHEMICAL POWDER OR APPROPRIATE FOAM.

SPECIAL FIREFIGHTING PROCEDURES

WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING TO PREVENT CONTACT WITH SKIN AND EYES.

UNUSUAL FIRE AND EXPLOSION HAZARDS  
EMITS TOXIC FUMES UNDER FIRE CONDITIONS.

**6. Accidental Release Measures**

A. Person-related safety precautions

Use personal protective equipment

B. Measures for cleaning

Absorb on sand or vermiculite and place in closed containers for disposal. Ventilate area and wash spill site after material pickup is complete.

**7. PRECAUTIONS FOR SAFE HANDLING AND USE**

No special handling advice required. Keep tightly closed. Store in a cool dry place.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

CHEMICAL SAFETY GOGGLES.

COMPATIBLE CHEMICAL-RESISTANT GLOVES.

NIOSH/MSHA-APPROVED RESPIRATOR.

SAFETY SHOWER AND EYE BATH.

MECHANICAL EXHAUST REQUIRED.

DO NOT BREATHE DUST.

AVOID CONTACT WITH EYES, SKIN AND CLOTHING.

WASH THOROUGHLY AFTER HANDLING.

IRRITANT.

KEEP TIGHTLY CLOSED.

STORE IN A COOL DRY PLACE.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

APPEARANCE AND ODOR

WHITE POWDER

**10. STABILITY AND REACTIVITY**

INCOMPATIBILITIES

STRONG OXIDIZING AGENTS

STRONG BASES

COPPER, COPPER ALLOYS

NICKEL

HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS

TOXIC FUMES OF:

CARBON MONOXIDE, CARBON DIOXIDE

NITROGEN OXIDES

**11. TOXICOLOGICAL INFORMATION**

ACUTE EFFECTS

MAY BE HARMFUL BY INHALATION, INGESTION, OR SKIN ABSORPTION.

CAUSES EYE AND SKIN IRRITATION.

MATERIAL IS IRRITATING TO MUCOUS MEMBRANES AND UPPER RESPIRATORY TRACT.

TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.

RTECS #: AH4025000

ACETIC ACID, (ETHYLENEDINITRILLO)TETRA-  
TOXICITY DATA

IPR-RAT LD50:397 MG/KG AHRTAN 13,295,1962

ORL-MUS LD50:30 MG/KG FCTOD7 29,845,1991

IPR-MUS LD50:250 MG/KG NTIS\*\* AD691-490

IVN-MUS LD50:28500 UG/KG

JJPAAZ 63,187,1993

TARGET ORGAN DATA

BEHAVIORAL (CONVULSIONS OR EFFECT ON SEIZURE THRESHOLD)

ONLY SELECTED REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES  
(RTECS) DATA IS PRESENTED HERE. SEE ACTUAL ENTRY IN RTECS FOR

COMPLETE INFORMATION.

#### **14. TRANSPORT INFORMATION**

- A. UN number : No data available.
- B. UN proper shipping number : Not applicable.
- C. Transport hazard class : Not applicable.
- D. Packing group, if applicable : Not applicable.
- E. Environmental hazards : No data available.
- F. Special precautions for user: Not applicable.

#### ● **Tris (TRIZMA BASE)**

#### **2. HEALTH HAZARD DATA**

LD50-LC50 MIXTURE: ORAL LD50(RAT): 5900 MG/KG

ROUTE OF ENTRY - INHALATION: YES

ROUTE OF ENTRY - SKIN: YES

ROUTE OF ENTRY - INGESTION: YES

HEALTH HAZ ACUTE AND CHRONIC: MAY BE HARMFUL BY INHALATION, INGESTION/SKIN

ABSORPTION. EYES/SKIN: IRRITATION. INHALATION: IRRITATING TO MUCOUS MEMBRANES & UPPER RESPIRATORY TRACT.

CARCINOGENICITY - NTP: NO

CARCINOGENICITY - IARC: NO

CARCINOGENICITY - OSHA: NO

EXPLANATION CARCINOGENICITY: NONE

SIGNS/SYMPTOMS OF OVEREXP: IRRITATION.

EMERGENCY/FIRST AID PROC: EYES/SKIN: FLUSH W/COPIOUS AMOUNTS OF WATER FOR

15 MINS. INHALATION: REMOVE TO FRESH AIR. GIVE CPR/OXYGEN IF NEEDED.

INGESTION: WASH OUT MOUTH W/WATER IF CONSCIOUS. OBTAIN MEDICAL ATTENTION IN ALL CASES.

#### **3. INGREDIENTS/IDENTITY INFORMATION**

PROPRIETARY: NO

INGREDIENT: 1,3-PROPANEDIOL , 2-AMINO-2-(HYDROXYMETHYL), TROMETHAMINE

INGREDIENT SEQUENCE NUMBER: 01

NIOSH (RTECS) NUMBER: TY2900000

CAS NUMBER: 77-86-1

#### **5. FIRE AND EXPLOSION HAZARD DATA**

EXTINGUISHING MEDIA: WATER SPRAY, CO2, DRY CHEMICAL POWDER/APPROPRIATE FOAM.

SPECIAL FIRE FIGHTING PROC: WEAR SCBA & PROTECTIVE CLOTHING.

UNUSUAL FIRE AND EXPL HAZRDS: EMITS TOXIC FUMES UNDER FIRE CONDITIONS.

#### **7. PRECAUTIONS FOR SAFE HANDLING AND USE**

STEPS IF MATL RELEASED/SPILL: WEAR RESPIRATOR, CHEMICAL SAFETY GOGGLES, RUBBER BOOTS & HEAVY RUBBER GLOVES. SWEEP UP, PLACE IN A BAG & HOLD FOR WASTE DISPOSAL. AVOID RAISING DUST. VENTILATE AREA & WASH SITE AFTER MATERIAL PICKUP IS COMPLETE.

WASTE DISPOSAL METHOD: DISSOLVE/MIX W/A COMBUSTIBLE SOLVENT & BURN IN A CHEMICAL INCINERATOR EQUIPPED W/AN AFTERBURNER & SCRUBBER, IAW/FEDERAL, STATE & LOCAL REGULATIONS.

PRECAUTIONS-HANDLING/STORING: STORE IN A COOL DRY PLACE. KEEP TIGHTLY CLOSED.

OTHER PRECAUTIONS: AVOID PROLONGED/REPEATED EXPOSURE. AVOID CONTACT W/EYES, SKIN/CLOTHING. DON'T BREATHE DUST.

## **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

RESPIRATORY PROTECTION: USE NIOSH/MSHA APPROVED RESPIRATOR.

VENTILATION: MECHANICAL EXHAUST REQUIRED.

PROTECTIVE GLOVES: COMPATIBLE CHEMICAL RESISTANT

EYE PROTECTION: CHEMICAL SAFETY GOGGLES

OTHER PROTECTIVE EQUIPMENT: SAFETY SHOWER & EYE BATH, PROTECTIVE CLOTHING.

WORK HYGIENIC PRACTICES: REMOVE/LAUNDER CONTAMINATED CLOTHING & SHOES

BEFORE REUSE. WASH THOROUGHLY AFTER HANDLING.

SUPL. SAFETY & HEALTH DATA: MELTING POINT: 340.16-342.14F.

## **9. PHYSICAL/CHEMICAL CHARACTERISTICS**

APPEARANCE AND ODOR: WHITE CRYSTALS

BOILING POINT: 426.2-428F

MELTING POINT: (SEE SUPP)

## **10. REACTIVITY DATA**

STABILITY: YES

COND TO AVOID (STABILITY): MOISTURE.

MATERIALS TO AVOID: BASES, OXIDIZING AGENTS.

HAZARDOUS DECOMP PRODUCTS: THERMAL COMBUSTION: CO, CO<sub>2</sub>, NITROGEN OXIDES.

HAZARDOUS POLY OCCUR: NO

## **14. TRANSPORT INFORMATION**

A. UN number : No data available.

B. UN proper shipping number : Not applicable.

C. Transport hazard class : Not applicable.

D. Packing group, if applicable : Not applicable.

E. Environmental hazards : No data available.

F. Special precautions for user: Not applicable.

## **● HYDROCHLORIC ACID**

### **2. HEALTH HAZARD DATA**

STABLE. AVOID HEAT, FLAMES. INCOMPATIBLE WITH MOST COMMON METALS, AMINES, METAL OXIDES, ACETIC ANHYDRIDE, PROPIOLACTONE, VINYL ACETATE, MERCURIC SULPHATE, CALCIUM PHOSPHIDE, FORMALDEHYDE, ALKALIES, CARBONATES, STRONG BASES, SULPHURIC ACID, CHLOROSULPHONIC ACID.

### **3. INGREDIENTS/IDENTITY INFORMATION**

APPEARANCE: CLEAR COLOURLESS OR SLIGHTLY YELLOW LIQUID WITH PUNGENT ODOUR. FUMING.

MELTING POINT: -25 C

BOILING POINT: 109 C

SPECIFIC GRAVITY: 1.19

VAPOUR PRESSURE: NO INFORMATION

FLASH POINT: NO INFORMATION

EXPLOSION LIMITS: NO INFORMATION

AUTOIGNITION TEMPERATURE: NO INFORMATION

### **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

SAFETY GLASSES OR FACE MASK, GLOVES. EFFECTIVE VENTILATION.

### **11. TOXICOLOGY**

EXTREMELY CORROSIVE. INHALATION OF VAPOUR CAN CAUSE SERIOUS INJURY. INGESTION MAY BE FATAL. LIQUID CAN CAUSE SEVERE DAMAGE TO SKIN AND EYES. TLV 5 PPM.

### **2. HEALTH HAZARD DATA**

LD50-LC50 MIXTURE: ORAL LD50(RAT): 475 MG/KG

ROUTE OF ENTRY - INHALATION: YES

ROUTE OF ENTRY - SKIN: YES  
ROUTE OF ENTRY - INGESTION: YES  
HEALTH HAZ ACUTE AND CHRONIC: HARMFUL IF INGESTED, INHALED/ABSORBED THROUGH SKIN, CAUSES SEVERE IRRITATION. HIGH CONCENTRATIONS ARE EXTREMELY DESTRUCTIVE TO TISSUES OF THE MUCOUS MEMBRANES & UPPER RESPIRATORY TRACT, EYES & SKIN. MAY CAUSE NERVOUS SYSTEM DISTURBANCES & BURNING.

CARCINOGENICITY - NTP: NO

CARCINOGENICITY - IARC: NO

CARCINOGENICITY - OSHA: NO

EXPLANATION CARCINOGENICITY: NONE

SIGNS/SYMPTOMS OF OVEREXP: IRRITATION, BURNING SENSATION, COUGHING, WHEEZING, LARYNGITIS, SHORTNESS OF BREATH, HEADACHE, NAUSEA, VOMITING.

EMERGENCY/FIRST AID PROC: EYES/SKIN: IMMEDIATELY FLUSH W/COPIOUS AMOUNTS OF WATER FOR 15 MINS. INHALATION: REMOVE TO FRESH AIR. GIVE CPR/ OXYGEN IF NEEDED. INGESTION: WASH OUT MOUTH W/WATER IF CONSCIOUS. OBTAIN MEDICAL ATTENTION IN ALL CASES.

### **3. INGREDIENTS/IDENTITY INFORMATION**

PROPRIETARY: NO

INGREDIENT: MONOHYDROCHLORIDE, GUANIDINIUM CHLORIDE

INGREDIENT SEQUENCE NUMBER: 01

PERCENT: 99

NIOSH (RTECS) NUMBER: MF4300000

CAS NUMBER: 50-01-1

### **5. FIRE AND EXPLOSION HAZARD DATA**

EXTINGUISHING MEDIA: WATER SPRAY, CO2, DRY CHEMICAL POWDER/APPROPRIATE FOAM.

SPECIAL FIRE FIGHTING PROC: WEAR SCBA & PROTECTIVE CLOTHING.

UNUSUAL FIRE AND EXPL HAZRDS: EMITS TOXIC FUMES UNDER FIRE CONDITIONS.

### **7. PRECAUTIONS FOR SAFE HANDLING AND USE**

STEPS IF MATL RELEASED/SPILL: WEAR SCBA, RUBBER BOOTS & HEAVY RUBBER GLOVES. SWEEP UP, PLACE IN A BAG & HOLD FOR WASTE DISPOSAL. AVOID RAISING DUST. VENTILATE AREA & WASH AREA AFTER MATERIAL PICKUP IS COMPLETE.

WASTE DISPOSAL METHOD: DISSOLVE/MIX MATERIAL W/A COMBUSTIBLE SOLVENT & BURN IN A CHEMICAL INCINERATOR EQUIPPED W/AN AFTERBURNER & SCRUBBER, IAW/

FEDERAL, STATE & LOCAL REGULATIONS.

PRECAUTIONS-HANDLING/STORING: KEEP TIGHTLY CLOSED. STORE IN A COOL DRY PLACE.

OTHER PRECAUTIONS: AVOID INHALATION. DON'T GET IN EYES, SKIN/CLOTHING.

AVOID PROLONGED/REPEATED EXPOSURE. HYGROSCOPIC.

### **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

RESPIRATORY PROTECTION: WEAR APPROPRIATE NIOSH/MSHA APPROVED RESPIRATOR.

VENTILATION: CHEMICAL FUME HOOD

PROTECTIVE GLOVES: CHEMICAL RESISTANT

EYE PROTECTION: SAFETY GOGGLES/FACESHIELD (8 INCH MIN)

OTHER PROTECTIVE EQUIPMENT: PROTECTIVE CLOTHING, SAFETY SHOWER & EYE BATH.

### **9. PHYSICAL/CHEMICAL CHARACTERISTICS**

APPEARANCE AND ODOR: WHITE CRYSTALLINE POWDER

MELTING POINT: 365-372.2F

### **10. REACTIVITY DATA**

STABILITY: YES

COND TO AVOID (STABILITY): MOISTURE

MATERIALS TO AVOID: STRONG OXIDIZING AGENTS

HAZARDOUS DECOMP PRODUCTS: COMBUSTION: CO, CO2, NITROGEN OXIDES,

HYDROGEN  
CHLORIDE GAS.  
HAZARDOUS POLY OCCUR: NO

**14. TRANSPORT INFORMATION**

- A. UN number : No data available.
- B. UN proper shipping number : Not applicable.
- C. Transport hazard class : Not applicable.
- D. Packing group, if applicable : Not applicable.
- E. Environmental hazards : No data available.
- F. Special precautions for user: Not applicable.

● **SDS (LAURYL SULFATE)**

**2. HAZARDS IDENTIFICATION**

LABEL PRECAUTIONARY STATEMENTS

TOXIC (USA)

HARMFUL (EU)

HARMFUL BY INHALATION AND IF SWALLOWED.

MAY CAUSE SENSITIZATION BY INHALATION.

IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN.

RISK OF SERIOUS DAMAGE TO EYES.

IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE.

WEAR SUITABLE PROTECTIVE CLOTHING.

DO NOT BREATHE VAPOR.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

CAS #: 151-21-3

EC NO: 205-788-1

**4. FIRST-AID MEASURES**

IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES OR SKIN WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES WHILE REMOVING CONTAMINATED CLOTHING AND SHOES.

IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS. CALL A PHYSICIAN.

IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN.

ASSURE ADEQUATE FLUSHING OF THE EYES BY SEPARATING THE EYELIDS WITH FINGERS.

● **POTASSIUM ACETATE**

**2. HAZARDS IDENTIFICATION**

LABEL PRECAUTIONARY STATEMENTS

IRRITANT

IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN.

IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE.

WEAR SUITABLE PROTECTIVE CLOTHING.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

CAS #: 127-08-2

MF: C<sub>2</sub>H<sub>3</sub>KO<sub>2</sub>

EC NO: 204-822-2

SYNONYMS

DIURETIC SALT \* OCTAN DRASELNY (CZECH) \* POTASSIUM ACETATE \*

**4. FIRST-AID MEASURES**

IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS.

CALL A PHYSICIAN.

IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN.

IN CASE OF CONTACT, IMMEDIATELY WASH SKIN WITH SOAP AND COPIOUS AMOUNTS OF WATER.

IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES.

#### **5. FIRE FIGHTING MEASURES**

EXTINGUISHING MEDIA

WATER SPRAY.

CARBON DIOXIDE, DRY CHEMICAL POWDER OR APPROPRIATE FOAM.

SPECIAL FIREFIGHTING PROCEDURES

WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING TO PREVENT CONTACT WITH SKIN AND EYES.

UNUSUAL FIRE AND EXPLOSIONS HAZARDS

EMITS TOXIC FUMES UNDER FIRE CONDITIONS.

#### **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

SAFETY SHOWER AND EYE BATH.

MECHANICAL EXHAUST REQUIRED.

WASH THOROUGHLY AFTER HANDLING.

DO NOT BREATHE DUST.

AVOID CONTACT WITH EYES, SKIN AND CLOTHING.

AVOID PROLONGED OR REPEATED EXPOSURE.

NIOSH/MSHA-APPROVED RESPIRATOR.

COMPATIBLE CHEMICAL-RESISTANT GLOVES.

CHEMICAL SAFETY GOGGLES.

KEEP TIGHTLY CLOSED.

STORE IN A COOL DRY PLACE.

#### **11. TOXICOLOGICAL INFORMATION**

ACUTE EFFECTS

CAUSES SKIN IRRITATION.

CAUSES EYE IRRITATION.

MATERIAL IS IRRITATING TO MUCOUS MEMBRANES AND UPPER RESPIRATORY TRACT.

MAY BE HARMFUL BY INHALATION, INGESTION, OR SKIN ABSORPTION.

TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.

RTECS #: AJ3325000

ACETIC ACID, POTASSIUM SALT

TOXICITY DATA

ORL-RAT LD50:3250 MG/KG

AIHAAP 30,470,1969

ONLY SELECTED REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES

(RTECS) DATA IS PRESENTED HERE. SEE ACTUAL ENTRY IN RTECS FOR COMPLETE INFORMATION.

#### ● **ACETIC ACID, GLACIAL**

#### **2. HAZARDS IDENTIFICATION**

LABEL PRECAUTIONARY STATEMENTS

COMBUSTIBLE (USA)

FLAMMABLE (EU)

CORROSIVE

CAUSES SEVERE BURNS.

HARMFUL IN CONTACT WITH SKIN.

LACHRYMATOR.

TARGET ORGAN(S):

TEETH

KIDNEYS

KEEP AWAY FROM SOURCES OF IGNITION - NO SMOKING.

IN CASE OF ACCIDENT OR IF YOU FEEL UNWELL, SEEK MEDICAL ADVICE IMMEDIATELY (SHOW THE LABEL WHERE POSSIBLE).

IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE.

WEAR SUITABLE PROTECTIVE CLOTHING, GLOVES AND EYE/FACE PROTECTION.

### **3. COMPOSITION/INFORMATION ON INGREDIENTS**

CAS #: 64-19-7

MF: C2H4O2

EC NO: 200-580-7

SYNONYMS

ACETIC ACID (ACGIH:OSHA) \* ACETIC ACID, GLACIAL \* ACIDE ACETIQUE (FRENCH) \* ACIDO ACETICO (ITALIAN) \* AZIJNZUUR (DUTCH) \* ESSIGSAEURE (GERMAN) \* ETHANOIC ACID \* ETHYLIC ACID \* GLACIAL ACETIC ACID \* KYSELINA OCTOVA (CZECH) \* METHANECARBOXYLIC ACID \* OCTOWY KWAS (POLISH) \* VINEGAR ACID \*

### **4. FIRST-AID MEASURES**

IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS. CALL A PHYSICIAN IMMEDIATELY.

IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN.

IN CASE OF SKIN CONTACT, FLUSH WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES. REMOVE CONTAMINATED CLOTHING AND SHOES. CALL A PHYSICIAN.

IN CASE OF CONTACT WITH EYES, FLUSH WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES. ASSURE ADEQUATE FLUSHING BY SEPARATING THE EYELIDS WITH FINGERS. CALL A PHYSICIAN.

### **14. TRANSPORT INFORMATION**

A. UN number : No data available.

B. UN proper shipping number : Not applicable.

C. Transport hazard class : Not applicable.

D. Packing group, if applicable : Not applicable.

E. Environmental hazards : No data available.

F. Special precautions for user: Not applicable.

### **● RNASE (RIBONUCLEASE A)**

### **2. HAZARDS IDENTIFICATION**

LABEL PRECAUTIONARY STATEMENTS

CAUTION:

AVOID CONTACT AND INHALATION.

### **3. COMPOSITION/INFORMATION ON INGREDIENTS**

CAS #: 9001-99-4

EC NO: 232-646-6

### **4. FIRST-AID MEASURES**

IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS. CALL A PHYSICIAN.

IF INHALED, REMOVE TO FRESH AIR. IF BREATHING BECOMES DIFFICULT, CALL A PHYSICIAN.

IN CASE OF SKIN CONTACT, FLUSH WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES. REMOVE CONTAMINATED CLOTHING AND



SHOES. CALL A PHYSICIAN.

IN CASE OF CONTACT WITH EYES, FLUSH WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES. ASSURE ADEQUATE FLUSHING BY SEPARATING THE EYELIDS WITH FINGERS. CALL A PHYSICIAN.

#### **5. FIRE FIGHTING MEASURES**

EXTINGUISHING MEDIA

NONCOMBUSTIBLE.

USE EXTINGUISHING MEDIA APPROPRIATE TO SURROUNDING FIRE CONDITIONS.

SPECIAL FIREFIGHTING PROCEDURES

WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING TO PREVENT CONTACT WITH SKIN AND EYES.

UNUSUAL FIRE AND EXPLOSIONS HAZARDS

EMITS TOXIC FUMES UNDER FIRE CONDITIONS.

#### **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

NIOSH/MSHA-APPROVED RESPIRATOR.

COMPATIBLE CHEMICAL-RESISTANT GLOVES.

CHEMICAL SAFETY GOGGLES.

SAFETY SHOWER AND EYE BATH.

MECHANICAL EXHAUST REQUIRED.

AVOID INHALATION.

AVOID CONTACT WITH EYES, SKIN AND CLOTHING.

AVOID PROLONGED OR REPEATED EXPOSURE.

WASH THOROUGHLY AFTER HANDLING.

KEEP TIGHTLY CLOSED.

STORE IN A COOL DRY PLACE.

#### **14. TRANSPORT INFORMATION**

A. UN number : No data available.

B. UN proper shipping number : Not applicable.

C. Transport hazard class : Not applicable.

D. Packing group, if applicable : Not applicable.

E. Environmental hazards : No data available.

F. Special precautions for user: Not applicable.

#### **15. Regulatory Information**

A. Indication of danger

Not hazardous

B. Risk phrased

No information available

C. Safety phrases

No information available

#### **16. Other information**

This information is based on our present knowledge and shall be used only as a guide. However, this shall not constitute a guarantee for any specific product features. BIONEER is not held liable for any damage resulting from handling or from contact with the above products.