

# Material Safety Data Sheet

## Virus Nucleic Acid Isolation Kit

### 1. IDENTIFICATION OF THE PREPARATION/SUBSTANCE AND OF THE COMPANY

Preparation Name: Virus Nucleic Acid Isolation Kit

Catalogue number of the product: PDC03-0100

Use of the preparation: For laboratory use.

Company identification: BIO-HELIX Co., LTD.

Site: <http://www.bio-helix.com>

E-mail: [info@bio-helix.com](mailto:info@bio-helix.com)

### 2. COMPOSITION/ INFORMATION ON INGREDIENTS

Ingredients:

Component 1: Buffer V1

5-10% Guanidine Thiocyanate; CAS-No. 593-84-0

Component 2:

Buffer W1: 1 piece(s)

5-10% Guanidine Hydrochloride; CAS-No. 50-01-1

Component 3:

Buffer V2

10-25% Sodium Acetate; CAS-No. 127-09-3

Component 4:

Buffer W2, RNase-Free EL Buffer

No hazardous substances in concentrations to be declared

Other components:

Components not listed here are not dangerous or their concentrations do not exceed the limits specified in the EU directive 1999/45/EC.

### 3. HAZARD IDENTIFICATION

Guanidine Thiocyanate:

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

Health Rating: 2 - Moderate (Life)

Flammability Rating: 1 - Slight

Reactivity Rating: 1 - Slight

Contact Rating: 2 - Moderate

Lab Protective Equip: GOGGLES; LAB COAT; VENT HOOD; PROPER

GLOVES Storage Color Code: Green (General Storage)

Potential Health Effects

Inhalation:

Causes irritation to the respiratory tract. Symptoms may include coughing, shortness of breath.

Ingestion:

May cause psychosis, vomiting, disorientation, weakness, low blood pressure, convulsions and death which may be delayed. The probable lethal dose is between 15-30 grams.

# Material Safety Data Sheet

## Skin Contact:

Causes irritation to skin. Symptoms include redness, itching, and pain.

## Eye Contact:

Causes irritation, redness, and pain.

## Chronic Exposure:

Prolonged or repeated skin exposure may cause dermatitis. Repeated ingestion of small amounts may cause weakness, confusion, central nervous system effects, nausea and skin eruptions. Guanidine Hydrochloride:

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

Health Rating: 2 - Moderate

Flammability Rating: 1 - Slight

Reactivity Rating: 0 - None

Contact Rating: 2 - Moderate

Lab Protective Equip: GOGGLES; LAB COAT; VENT HOOD; PROPER

GLOVES Storage Color Code: Green (General Storage)

## Potential Health

### Effects Inhalation:

Causes irritation to the respiratory tract. Symptoms may include coughing, shortness of breath.

### Ingestion:

Toxic. May cause neurological disturbances. Causes irritation to the gastrointestinal tract. Symptoms may include nausea, vomiting and diarrhea.

## Skin Contact:

Causes irritation to skin. Symptoms include redness, itching, and pain.

## Eye Contact:

Causes irritation, redness, and pain.

## Sodium Acetate:

**CAUTION! MAY CAUSE IRRITATION TO SKIN, EYES, AND RESPIRATORY TRACT.** Health Rating: 1 - Slight

Flammability Rating: 1 - Slight

Reactivity Rating: 1 - Slight

Contact Rating: 1 - Slight

Lab Protective Equip: GOGGLES; LAB COAT; VENT HOOD; PROPER

GLOVES Storage Color Code: Green (General Storage)

## Potential Health

### Effects Inhalation:

May cause irritation to the respiratory tract. Symptoms may include coughing, sore throat, labored breathing, and chest pain.

### Ingestion:

Large doses may produce abdominal pain, nausea, and vomiting.

## Skin Contact:

May cause irritation with redness and pain.

## Eye Contact:

Contact may cause irritation, redness, and pain.

## Chronic Exposure:

No information found.

## Aggravation of Pre-existing Conditions:

No information found.

# Material Safety Data Sheet

## 4. FIRST-AID MEASURES

Guanidine Thiocyanate:

Inhalation:

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion:

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

Skin Contact:

Wipe off excess material from skin then immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.

Eye Contact:

Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

Guanidine Hydrochloride:

Inhalation:

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion:

Induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention.

Skin Contact:

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

Eye Contact:

Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

Sodium Acetate:

Inhalation:

Remove to fresh air. Get medical attention for any breathing difficulty. Ingestion:

Give several glasses of water to drink to dilute. If large amounts were swallowed, get medical advice.

Skin Contact:

Immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention if irritation develops.

Eye Contact:

Immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get medical attention if irritation persists.

## 5. FIRE-FIGHTING MEASURES

Extinguishing media: No restriction.

Decomposition: Dangerous decomposition is not anticipated.

# Material Safety Data Sheet

## 6. ACCIDENTAL RELEASE MEASURES

Actions to be taken on spillage:

Dilute spilled liquids with plenty of water and adsorb.

Absorbent material: No restriction.

Actions to be taken to limit

Damage: Special measures to limit damage are not necessary.

## 7. HANDLING AND STORAGE

Handling: Open and handle vessels carefully.

Storage: Store at room temperature.

Storage Procedures: Do not store together with acids.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory protection: No personal respiratory protective equipment normally required. Eye protection: Safety glasses

Hand protection: One-way gloves

Hygiene measures: Wash hands before and after use.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Buffer V1

Form: liquid

Miscibility with water:

immiscible pH : 4.5

Buffer W1

Form: liquid

Miscibility with water:

immiscible pH : 6.0

Buffer W2

Form: liquid

Miscibility with water:

immiscible pH : 7.5

Buffer RE

Form: liquid

Miscibility with water:

immiscible pH : 8.5

Buffer V2

Form: liquid

Miscibility with water:

immiscible pH : 5.2

## 10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions.

Conditions to Avoid: Reacts with alkalis and oxidizing agents. Hazardous

Decomposition Products: Danger of toxic pyrolysis products.

# Material Safety Data Sheet

## 12. ECOLOGICAL INFORMATION

Water hazard class: 2 (hazardous to water and ground)

## 13. DISPOSAL CONSIDERATIONS

Waste disposal route: Used reagent can be disposed in accordance with local regulations.

Disposal of empty packaging: Dispose of empty packs by local recycling or waste disposal routes.

Clean thoroughly prior to disposal.

## 14. TRANSPORT INFORMATION

DOT regulations:

Hazard class: -

Land transport ADR/RID (cross-border):

ADR/RID class: -

Maritime transport IMDG:

IMDG Class: -

Marine pollutant: No

Air transport ICAO-TI and IATA-DGR

ICAO/IATA Class: -

## 15. REGULATORY INFORMATION

SARA (Superfund and Reauthorization Act)

Section 355 (extremely hazardous substances): None of the ingredients are listed.

Section 313 (Specific toxic chemical listings): None of the ingredients are listed.

TSCA (Toxic Substances Control Act): All ingredients are listed.

Proposition 65

Chemicals known to cause cancer: None of the ingredients are listed.

Chemicals known to cause reproductive toxicity: None of the ingredients are listed.

## 16. OTHER INFORMATION

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. PureDireX (Bio-Helix) shall not be held liable for any damage resulting from handling or from contact with the above product.