



Total RNA Isolation Kit (Blood/ Cultured Cell/ Fungus) (Column Based)

Identification of the product / Substance and of the company

Product Name: Total RNA Isolation Kit (Blood/ Cultured Cell/ Fungus) (Column Based)

Catalogue number of the product: PDC04-0100(S)

Use of the product: For laboratory use.

Company identification: BIO-HELIX Co.,LTD.

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

E-mail: info@bio-helix.com

Composition / Information on ingredients

Ingredient:

Buffer RL 0.1-5% Edetic Acid CAS-No. 6381-92-6

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

Buffer RO 0.1-5% Edetic Acid CAS-No. 6381-92-6

0.5-2% Sodium Dodecyl Sulphate CAS-No. 151-21-3

Buffer W1 5-10% Guanidine Hydrochloride CAS-No. 50-01-1

buffer W2 No hazardous substances in concentrations to be declared.

Buffer RE No hazardous substances in concentrations to be declared.

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

Hazards identification

Edetic Acid

Signal word: Warning

Acute oral toxicity: Category 5

Eye damage/eye irritation: Category 2A

Hazard statements: Cause eye irritation. Harmful if swallowed.

Precautionary statements: Wear protective gloves/ protective clothing/ eye protection/ face protection.

Storage: Store in a well-ventilated place.

Other hazards: None known.

Guanidine Thiocyanate:

Signal word: Danger

Acute oral toxicity: Category 4

Acute inhalation toxicity: Category 4

Acute dermal toxicity: Category 4

Skin irritation: Category 1C

Hazard statements: Cause eye damage. Harmful if swallowed, in contact skin, or inhaled.

Precautionary statements: Wear protective gloves/ protective clothing/ eye protection/ face protection.

Storage: Store in a well-ventilated place.





Other hazards: None known.

Sodium Dodecyl Sulphate

Signal: Danger

Acute oral toxicity: Category 4

Acute inhalation toxicity: Category 4

Skin irritation: Category 2

Eye damage/eye irritation: Category 1

Flammable solids: Category 2

Hazard statements: Cause eye damage. Harmful if swallowed, in contact skin, or inhaled. May cause respiratory irritation.

Precautionary statements: Wear protective gloves/ protective clothing/ eye protection/ face protection.

Keep away from heat, sparks, open flames, hot surfaces.

Storage: Store in a well-ventilated place.

Other hazards: None known.

Guanidine Hydrochloride:

Signal word: Warning

Acute oral toxicity: Category 4

Acute inhalation toxicity: Category 4

Skin irritation: Category 2

Eye damage/eye irritation: Category 2A

Hazard statements: Cause eye irritation. Harmful if swallowed.

Precautionary statements: Wear protective gloves/ protective clothing/ eye protection/ face protection.

Storage: Store in a well-ventilated place.

Other hazards: None known.

First Aid Measures

Edetic Acid:

In case of eye contact:

Immediately rinse out with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

In case of skin contact:

Remove contaminated clothing and shoes. Immediately flush skin with plenty of water for at least 15 minutes. Get medical aid.

If inhaled:

Remove from exposure and move to fresh air immediately.

If swallowed:

Give large amounts of water to drink. Never give anything by mouth to an unconscious person. Get medical attention.



Guanidine Thiocyanate:

In case of eye contact:

Immediately rinse out with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

In case of skin contact:

Remove contaminated clothing and shoes. Immediately flush skin with plenty of water for at least 15 minutes. Get medical aid.

If inhaled:

Remove from exposure and move to fresh air immediately. If necessary, also oxygen.

If swallowed:

Give large amounts of water to drink. Never give anything by mouth to an unconscious person. Get medical attention.

Sodium Dodecyl Sulphate:

In case of eye contact:

Immediately rinse out with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

In case of skin contact:

Immediately flush skin with plenty of water for at least 15 minutes. Get medical aid.

If inhaled:

Remove from exposure and move to fresh air immediately.

If swallowed:

Give large amounts of water to drink. Never give anything by mouth to an unconscious person. Get medical attention.

Guanidine Hydrochloride:

In case of eye contact:

Immediately rinse out with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

In case of skin contact:

Remove contaminated clothing and shoes. Immediately flush skin with plenty of water for at least 15 minutes. Get medical aid.

If inhaled:

Remove from exposure and move to fresh air immediately. If necessary, also oxygen.

If swallowed:

Give large amounts of water to drink. Never give anything by mouth to an unconscious person. Get medical attention.



Fire-fighting measures

Extinguishing media: Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.
 Decomposition: Dangerous decomposition is not anticipated.

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.

Handling and storage

Advice on safe handling: Open and handle vessels carefully. Avoid contact with skin and eyes.
 Storage condition: Keep container tightly closed. Store at room temperature.
 Storage procedures: Do not store together with acids.

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.

Physical and chemical properties

Buffer RL	Form: liquid	Miscibility with water: immiscible	pH: 8.0
Buffer RA	Form: liquid	Miscibility with water: immiscible	pH: 4.5
Buffer RO	Form: liquid	Miscibility with water: immiscible	pH: 4.5
Buffer W1	Form: liquid	Miscibility with water: immiscible	pH: 7.0
Buffer W2	Form: liquid	Miscibility with water: immiscible	pH: 7.5
Buffer RE	Form: liquid	Miscibility with water: immiscible	pH: 8.5

Stability and reactivity

Stability: Stable under normal conditions.
 Reactivity: Stable under normal conditions.
 Conditions to avoid: Reacts with alkalis and oxidizing agents.
 Hazardous decomposition products: Danger of toxic pyrolysis products.

Toxicological information

Edetic Acid
 Acute oral toxicity: LD50 rat 4,500 mg/kg.
 Skin corrosion/irritation: rabbit – No skin irritation – 20 hrs.
 Eye damage: Causes eye irritation.



Guanidine Thiocyanate

Acute oral toxicity: LD50 rat 593 mg/kg.

Skin corrosion/irritation: rabbit – Corrosive after exposure – 1 to 4 hrs.

Eye damage: Causes serious eye damage.

Sodium Dodecyl Sulphate

Acute oral toxicity: LD50 rat 977 mg/kg.

Skin corrosion/irritation: rabbit – Irritations.

Eye damage: Irreversible effects on the eye.

Guanidine Hydrochloride

Acute oral toxicity: LD50 rat 475 mg/kg

Skin corrosion/irritation: Irritations.

Eye damage: Causes serious eye damage.

Ecological information

May be harmful to aquatic. Avoid release to the environment.

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.

Transport information

Special precautions: None known.

Proper shipping name: Not dangerous goods according to transport regulations.

National transport regulations: No additional national transport regulations are known to the supplier.

IMDG: Non-hazardous for sea freight.

ADR: Non-hazardous for road transport.

RID: Non-hazardous for rail transport.

ICAO/IATA: Non-hazardous for air transport.

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.



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.