

Identification of the product / Substance and of the company

Product Name: Plant Total RNA Isolation Reagent (Reagent Based)

Catalogue number of the product: PDR04-0100(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

Buffer PR1	5-10% Guanidine Thiocyanate	CAS-No. 593-84-0
Buffer PR2	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.

Hazards identification

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.

First Aid Measures

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:



medical attention.

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

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

Handling: Open and handle vessels carefully.

Storage: 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 PR1	Form: liquid	Miscibility with water: immiscible	pH: 4.5
Buffer PR2	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

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.

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): Section 313 (Specific toxic chemical listings): TSCA (Toxic Substances Control Act): Proposition 65 Chemicals known to cause cancer: Chemicals known to cause reproductive toxicity:

None of the ingredients are listed. None of the ingredients are listed. All ingredients are listed.

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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.

