



Mbead Plant Genomic DNA Kit (Magnetic Beads Based)

Identification of the product / Substance and of the company

Product Name: MBead Plant Genomic DNA Kit
 Catalogue number of the product: PDM05-0100(S)
 Use of the product: For laboratory use.
 Suitable for use as DNA Purification for DNA electrophoresis
 Company identification: BIO-HELIX Co.,LTD.
 Site: <http://www.bio-helix.com>
 E-mail: info@bio-helix.com

Composition / Information on ingredients

Ingredients:

Grind Buffer	0.5-2% Sodium Dodecyl Sulphate	CAS-No. 151-21-3
Lysis Buffer	5-10% Guanidine Hydrochloride	CAS-No. 50-01-1
Wash Buffer	10-15% Propan-2-ol	CAS-No. 71-23-8
Release Buffer	No hazardous substances in concentrations to be declared	
Magnetic Bead	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

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.





Propan-2-ol:

IMMEDIATE CONCERNS: CAUTION! May cause eye and skin irritation.

Potential Health Effects

Ingestion:

Harmful if swallowed.

Inhalation:

May cause nasal and respiratory tract irritation.

Eye Contact:

Moderately irritating to the eyes.

Skin Contact:

May cause slight irritation.

Aggravation of Pre-existing Conditions:

Dermatitis may be aggravated by excessive exposure to skin.

Sodium Dodecyl Sulphate:

WARNING! HARMFUL IF SWALLOWED OR INHALED. CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT. MAY CAUSE ALLERGIC SKIN OR RESPIRATORY REACTION. FLAMMABLE SOLID.

First Aid Measures

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 Dodecyl Sulphate:

Inhalation:

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

Ingestion:

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

Skin Contact:

Immediately flush skin with plenty of soap and water. 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.

Propan-2-ol:

Eye Contact: Flush eye with water for 15 minutes. Seek medical attention if irritation persists. Skin Contact: Wash with soap and water.

Ingestion:

Do not induce vomiting. Seek medical attention immediately.

Inhalation:

Move to fresh air

Fire-fighting measures

Extinguishing media: No restriction.

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	Form	Miscibility with water	pH
Grind Buffer	liquid	immiscible	7.5
Lysis Buffer	liquid	immiscible	4.5
Wash Buffer	liquid	immiscible	5.0
Release Buffer	liquid	immiscible	8.5



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.

Toxicological information

Guanidine Hydrochloride

Oral toxicity: LD50 rat 475 mg/kg
Toxicity (inhalation): LD50 rat 5.3 mg/l (4 h)
Toxicity (others): LD50 intra peritoneal mouse 500 mg/kg
Primary irritant effect:
On the skin: irritant to skin and mucous membranes.
On the eye: irritating effect.

Sodium Dodecyl Sulphate,

Oral toxicity: LD50 rat 1.288 mg/kg

Propan-2-ol

Oral toxicity: LD50 rat ~ 5.8 - g/Kg-rat

Ecological information

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

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.