

Material Safety Data Sheet



Genomic DNA Kits (Soil)

Authorization date: 12/23/2020

1. IDENTIFICATION AND INFORMATION

Commercial product: Genomic DNA Kits (Stool)

Product number: IB47820/821/822

Intended use: Research use only

Supplier: IBI Scientific
7445 Chavenelle Rd
Dubuque, IA. 52002

Telephone number: 800-253-4942

Emergency phone number : 911

2. CHEMICAL CHARACTERISATION

Component 1:

ST1 Buffer: 1 piece(s)

1.0-2.5% Edetic Acid; CAS-No. 6381-92-6

1-2.5% Sodium Dodecyl Sulphate; CAS-No. 151-21-3

Component 2:

ST2 Buffer: 1 piece(s)

10-25% Acetic Acid; CAS-No. 64-19-7

Component 3:

ST3 Buffer: 1 piece(s)

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

Component 4:

Wash Buffer: 1 piece(s)

No hazardous substances in concentrations to be declared

Component 5:

Elution Buffer: 1 piece(s)

No hazardous substances in concentrations to be declared

3. HAZARD IDENTIFICATION

Edetic Acid:

Warning! Causes respiratory tract irritation. Causes eye and skin irritation. May cause kidney damage. May cause reproductive and fetal effects.

Target Organs: Kidneys, eyes, skin.

Potential Health Effects

Eye: Causes eye irritation. Causes redness and pain.

Skin: Causes skin irritation. Causes redness and pain.

Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea. Ingestion of large amounts can cause hypocalcemic tetany due to formation of calcium complexes. Exposure may cause kidney injury, muscle cramps, bone-marrow depression, and a generalized allergic reaction. Ingestion of large quantities may cause appreciable systemic toxicity involving blood chemistry changes due to chelation properties.

Inhalation: Causes irritation of the mucous membrane and upper respiratory tract.

Chronic: May cause reproductive and fetal effects. Laboratory experiments have resulted in mutagenic effects.

Chronic exposure may cause kidney damage.

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.

Health Rating: 1 - Slight

Flammability Rating: 3 - Severe (Flammable)

Reactivity Rating: 1 - Slight

Contact Rating: 3 - Severe (Life)

Lab Protective Equip: GOGGLES & SHIELD; LAB COAT & APRON; VENT HOOD; PROPER GLOVES

Storage Color Code: Red (Flammable)

Potential Health Effects

Inhalation:

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

May cause allergic reaction in sensitive individuals.

Ingestion:

Large doses may cause gastrointestinal distress, nausea and diarrhea.

Skin Contact:

Mildly irritating to skin, causes dryness and a rash on continued exposure.

May cause allergic skin reactions.

Eye Contact:

Causes irritation, redness, and pain.

Chronic Exposure:

Chronic exposure may cause skin effects.

Aggravation of Pre-existing Conditions:

Persons with pre-existing skin disorders or impaired respiratory function may be more susceptible to the effects of the substance.

Acetic Acid:

POISON! DANGER! CORROSIVE. LIQUID AND MIST CAUSE SEVERE BURNS TO ALL BODY TISSUE. MAY BE FATAL IF SWALLOWED. HARMFUL IF INHALED. INHALATION MAY CAUSE LUNG AND TOOTH DAMAGE. FLAMMABLE LIQUID AND VAPOR.

Health Rating: 3 - Severe (Poison)

Flammability Rating: 2 - Moderate

Reactivity Rating: 2 - Moderate

Contact Rating: 4 - Extreme (Corrosive)

Lab Protective Equip: GOGGLES & SHIELD; LAB COAT & APRON; VENT HOOD; PROPER GLOVES; CLASS B EXTINGUISHER

Storage Color Code: Red (Flammable)

Potential Health Effects

Inhalation:

Inhalation of concentrated vapors may cause serious damage to the lining of the nose, throat, and lungs. Breathing difficulties may occur. Neither odor nor degrees of irritation

are adequate to indicate vapor concentration.

Ingestion:

Swallowing can cause severe injury leading to death. Symptoms include sore throat, vomiting, and diarrhea. Ingestion of as little as 1.0 ml has resulted in perforation of the esophagus.

Skin Contact:

Contact with concentrated solution may cause serious damage to the skin. Effects may include redness, pain, skin burns. High vapor concentrations may cause skin sensitization.

Eye Contact:

Eye contact with concentrated solutions may cause severe eye damage followed by loss of sight. Exposure to vapor may cause intense watering and irritation to eyes.

Chronic Exposure:

Repeated or prolonged exposures may cause darkening of the skin, erosion of exposed front teeth, and chronic inflammation of the nose, throat, and bronchial tubes.

Aggravation of Pre-existing Conditions:

Persons with pre-existing skin disorders or eye problems, or impaired respiratory function may be more susceptible to the effects of the substance.

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.

4. FIRST AID MEASURES

Edetic Acid:

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

Skin: Get medical aid. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

Ingestion: Never give anything by mouth to an unconscious person. Get medical aid. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

Inhalation: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician: Treat symptomatically and supportively.

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.

Acetic Acid:

Inhalation:

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

Ingestion:

DO NOT INDUCE VOMITING! Give large quantities of water or milk if available. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Skin Contact:

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Call a physician.

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.

5. FIRE FIGHTING MEASURE

Extinguishing media: No restriction.

Decomposition: Dangerous decomposition is not anticipated.

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

ST1 Buffer: 1 piece(s)

Form: liquid

Miscibility with water: miscible

ST2 Buffer:

Form: liquid

Miscibility with water: miscible

ST3 Buffer:

Form: liquid

Miscibility with water: miscible

Wash Buffer:

Form: liquid

Miscibility with water: miscible

Elution Buffer:

Form: liquid

Miscibility with water: miscible

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.

11. TOXICOLOGICAL INFORMATION

ST1 Buffer

Edetic Acid

Oral toxicity: LD50 rat 2.000 mg/kg

Toxicity (others): LD50 oral rabbit 2.300 mg/kg

LD50 (intravenous, mouse) 56 mg/kg

Sodium Dodecyl Sulphate

Oral toxicity: LD50 rat 1.288 mg/kg

ST2 Buffer

Acetic Acid

Acute Toxicity: LD50 3310 mg/kg, oral (rat)

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 purpose to be all inclusive and shall be used only as a guide. IBI Scientific shall not be held liable for any damage resulting from handling or from contact with the above products. This is in no way constitutes a binding legal contract.