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MSDS Information for: Cat# P-9100  
EpiQuik Total RNA Isolation Kit

Components	50 samples P-9100-050	Shipping Temperature	Storage Upon Receipt
RL (Pre-lysis Buffer)	2 x 25 ml (50 ml)	RT	RT
RA (Lysis Buffer)	20 ml	RT	RT
RO (Pre-lysis Buffer- Bacteria/Fungus)	10 ml	RT	RT
W1 (Wash Buffer-1)	20 ml	RT	RT
W2 (Wash Buffer-2) *	2 x 3 ml (add 12 ml ethanol to each bottle)	RT	RT
RE (Elution Buffer)	5 ml	RT	RT
R-Column	50 pcs	RT	RT
Collection Tubes	50 pcs	RT	RT
User Guide	1	RT	RT

### Section 1. Identification

Product Name EpiQuik Total RNA Isolation Kit  
Product No. P-9100  
Supplier EpiGentek Group Inc.  
110 Bi County Blvd. Ste 122  
Farmingdale, NY 11735

In Case of Emergency 631-755-0888

### Section 2. Composition, Information on Ingredients

Ingredient 1 in RL (Pre-lysis Buffer) - CAS-No. 6381-92-6

Ingredient 2 in RA (Lysis Buffer) - CAS-No. 593-84-0

Ingredient 3 in RO (Pre-lysis Buffer-Bacteria/Fungus) - CAS-No. 151-21-3

Ingredient 4 in W1 (Wash Buffer-1) - CAS-No. 50-01-1

W2 (Wash Buffer-2) - 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.

### Section 3. Hazards Identification

**Ingredient 1:**

**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.

**Ingredient 2:**

**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.

**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.

**Ingredient 3:**

**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.

**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.

**Ingredient 4:**

**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.

## Section 4. First Aid Measures

**Ingredient 1:**

**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.

**Ingredient 2:**

**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.

**Ingredient 3:**

**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.

**Ingredient 4:**

**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.

**Section 5. Fire Fight Measures**

**Extinguishing media:** No restriction.

**Decomposition:** Dangerous decomposition is not anticipated.

**Section 6. Accident 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.

**Section 7. Handling and Storage**

**Handling:** Open and handle vessels carefully.

**Storage:** Store at room temperature.

**Storage Procedures:** Do not store together with acids.

**Section 8. Exposure Control and 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.

## Section 9. Physical and Chemical Properties

### RL (Pre-lysis Buffer)

Form: liquid

Miscibility with water: immiscible

### RA (Lysis Buffer)

Form: liquid

Miscibility with water: immiscible

### RO (Pre-lysis Buffer-Bacteria/Fungus)

Form: liquid

Miscibility with water: immiscible

### W1 (Wash Buffer-1)

Form: liquid

Miscibility with water: immiscible

### W2 (Wash Buffer-2)

Form: liquid

Miscibility with water: immiscible

### RE (Elution Buffer)

Form: liquid

Miscibility with water: immiscible

## Section 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.

## Section 11. Toxicological Information

### RL (Pre-lysis Buffer) and RO (Pre-lysis Buffer-Bacteria/Fungus)

#### Ingredient 1

**Oral toxicity:** LD50 rat 2.000 mg/kg

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

LD50 (intravenous, mouse) 56 mg/kg

### RA (Lysis Buffer)

#### Ingredient 2

**Toxicity (others):** ORL-RAT LD50 593 mg kg-1

IPR-MUS LD50 300 mg kg-1

### RO (Pre-lysis Buffer-Bacteria/Fungus)

#### Ingredient 3

**Oral toxicity:** LD50 rat 1.288 mg/kg

### W1 (Wash Buffer-1)

#### Ingredient 4

**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.

## Section 12. Ecological Information

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

## Section 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.

## Section 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: -

## Section 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.

## Section 16. Other Information

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if the company has been advised of the possibility of such damages.