

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND THE COMPANY/UNDERTAKING

Product Name: Enzyme-Linked Immunosorbent Assay Kit (ELISA Kit)

Catalog Number: EKE (ELISA KIT)

Recommended Use: For Laboratory Research Use Only.

Company: Biomatik Corporation

4 Third Avenue, Kitchener, Ontario, N2C 1N6 Canada

Telephone Number: 1-519-489-7195

Email: info@biomatik.com

Emergency Telephone Number: Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification according to GHS:

Physical hazards: Not classified

Health hazards: Not classified

Environmental hazards: Not classified

The hazards not mentioned are not applicable, or no data are available.

Emergency Overview:

To the best of our knowledge, the chemical, physical, and toxicological properties of the components of this kit have not been thoroughly investigated.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	Concentration	CAS No.	EC No.
Sodium chloride	0.8%	7647-14-5	231-598-3
Disodium hydrogenorthophosphate	0.115%	7558-79-4	231-448-7
Potassium dihydrogen phosphate	0.02%	7778-77-0	231-913-4
Potassium chloride	0.02%	7447-40-7	231-211-8

4. FIRST AID MEASURES

Skin Exposure: In case of contact, wash skin with soap and copious amounts of water. If irritation persists, call a physician.

Eye Exposure: In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. If irritation persists, call a physician.

Inhalation Exposure: If inhaled, remove to fresh air. If necessary, get medical attention.

Oral Exposure: Never give anything by mouth to an unconscious person. Rinse mouth with water. Call a physician.

5. FIRE-FIGHTING MEASURES

Extinguishing Media:

Suitable: Water spray, Dry chemical, Carbon dioxide, or appropriate foam.

Firefighting: Protective Equipment: Wear a self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

6. ACCIDENTAL RELEASE MEASURES

The procedure of Personal Precaution: Exercise appropriate precautions to minimize direct contact with skin or eyes and prevent inhalation.

Methods for Cleaning up: Absorb on sand or vermiculite and place in closed containers for disposal. Ventilate the area and wash the spill site after material pickup is complete.

Environmental precautions: Discharge into drains should be avoided.

7. HANDLING AND STORAGE

Handling: Wear appropriate protective clothing and safety gloves. Avoid inhalation. Avoid contact with eyes, skin, and clothing. Mechanical exhaust is required. Keep away from ignition sources, heat, and flame. No smoking at the work site.

Incompatibilities: Strong oxidizing agents, Strong acids. Handling and unloading should be light to prevent the packaging from breaking, becoming damp, and causing losses. The workplace should be equipped with appropriate varieties and quantities of firefighting equipment and emergency leakage treatment equipment.

Storage:

Store in a cool place. Keep the container tightly closed in a dry and well-ventilated place. Keep away from heat, sparks, and flame. Keep away from sources of ignition.

Incompatible: Strong oxidizing agents, strong acids. The storage place should be equipped with appropriate varieties and quantities of firefighting equipment and leakage emergency treatment equipment.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Mechanical exhaust is required. Safety shower and eye bath.

Personal Protective Equipment:

Respiratory: Government-approved respirator if needed.

Eye: Chemical safety goggles if needed.

Clothing: Wear appropriate protective clothing. Hand: Protective gloves.

Other Protect: No smoking, drinking, or eating at the working site. Wash thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Colorless, transparent liquid
Odor:	Weak odor
Initial Boiling Point /°C:	100°C
Flash Point (Closed Cup) /°C:	>96°C
pH Value:	7.5 (25 °C, 50.0g/L)
Solubility:	Miscible in water
Density/Relative Density:	1.008 x 10 ³ kg/m ³ (20.0 °C)
Viscosity:	1.074 mm ² /s (Kinematic viscosity)

10. STABILITY AND REACTIVITY

Stability: Stable under normal temperatures and pressures.

Materials to Avoid: Strong oxidizing agents, strong acids.

Hazardous Polymerization: Will not occur.

Hazardous Decomposition Products: Carbon oxides, Sodium oxides, Phosphorus oxides, Potassium oxides, and Hydrogen chloride gas.

11. TOXICOLOGICAL INFORMATION**Acute toxicity:**

Sodium chloride:

Rat Oral LD₅₀: 3000mg/kgRat Inhalation - LC₅₀: > 42,000 mg/m³/1HRabbit Skin LD₅₀: > 10,000 mg/kg

Sodium dihydrogenorthophosphate:

Rat Oral LD₅₀: 17000mg/kgRabbit Skin LD₅₀ :>4640 mg/kg**Skin corrosion/irritation:** No data is available.**Serious eye damage/irritation:** No data is available.**12. ECOLOGICAL INFORMATION****Toxicity:****Sodium chloride:**

Toxicity to daphnia and other aquatic invertebrates NOES – Daphnia – 1500 mg/l – 7D

LC₅₀ -Daphnia Magna (Water flea) – 1661 mg/l – 48h**Potassium chloride:**Toxicity to fish LC₅₀ – Pimephales promelas (fathead minnow): 880mg/l – 96 hours

Mortality NOEC – Pimephales promelas (fathead minnow): 500mg/l -7d

Mortality LOEC - Pimephales promelas (fathead minnow): 1000mg/l -7d

Toxicity to daphnia and other aquatic invertebrates EC₅₀ – Daphnia magna (Water flea) >83 mg/l - 48h**Persistence and degradability:** No data available.**Bioaccumulative potential:** No data available.**Mobility in soil:** No data available.**13. DISPOSAL CONSIDERATIONS**

Appropriate Method of Disposal of Substance: Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

14. TRANSPORT INFORMATION**RID/ADR:** Non-Hazardous for Transport. This substance is considered to be non-hazardous for transport.**IATA:** Non-Hazardous for Air Transport. Non-hazardous for air transport.**IMO:** Non-Hazardous for Sea Transport. Non-hazardous for sea transport.**15. REGULATORY INFORMATION**

Regulation (EC) No. 1272/2008 and its amendments:

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

16. OTHER INFORMATION

This material is sold for lab research purposes only. It is not for any human or animal therapeutic or clinical diagnostic use.

Disclaimer: The information provided on this MSDS is correct to the best of our knowledge, information, and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal, and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process unless specified in the text.

End of MSDS