

SAFETY DATA SHEET

VERSION 5.0 | REVISED: 2026-09-22

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

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

1.2 Catalog Number: EKL, RD ELISA Kit Series

1.3 Recommended Use: For Laboratory Research Use Only. Not for human or animal therapeutic or clinical diagnostic use.

1.4 Company Identification: Biomatik Corporation, 4 Third Ave, Kitchener, Ontario, N2C 1N6, Canada

1.5 Contact Telephone / Email: 1-519-489-7195 | Email: info@biomatik.com

1.6 Emergency Telephone Number: 1-519-590-7717

2. HAZARDS IDENTIFICATION

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS] and 29 CFR 1910.1200 [OSHA]:

2.1 Classification of the mixture: Kit reagents are not considered to be hazardous. They are mixtures that contain less than 1% hazardous chemicals and less than 0.1% carcinogenic chemicals.

2.2 Emergency Overview: No specific hazard. HMIS Rating: Health 0, Flammability 0, Reactivity 0. NFPA Rating: Health 0, Flammability 0, Reactivity 0.

2.3 Label Elements: No single component contains a hazardous ingredient in an amount that requires identification and labeling.

2.4 Potential Acute Health Effects & Routes of Entry: Avoid ingestion, inhalation, and contact with skin or eyes. May cause skin, eye, or lung irritation. To the best of our knowledge, the chemical, physical, and toxicological properties of the components of this kit have not been thoroughly investigated. Allergy-prone individuals should be particularly cautious with proteins or other materials of biological origin.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Kit reagents are non-hazardous mixtures. Component breakdown and chemical ingredients are detailed below:

Component Item / Reagent	Ingredient / Formulation	CAS No.	% Concentration / Volume
Antibody Coated Microwells	Anti-Target Antibody	—	Solid (Microwells)
Detection Reagent A (120 µl)	Detection Antibody; 50% Glycerol	56-81-5	50.0%
Detection Reagent B (120 µl)	HRP-linked Avidin; 50% Glycerol	56-81-5	50.0%
Diluent Buffer (45 ml)	TBS with 1% BSA & ProClin 300	9048-46-8 / 96118-96-6	1% BSA / 0.025% ProClin
Reference Standard (2 vials)	Calibration substance with preservatives	—	Freeze-dried / Solid
30X Wash Buffer (20 ml)	30X Tris-Buffered Saline (TBS)	—	30X Concentrate
TMB Substrate (9 ml)	3,3',5,5'-Tetramethylbenzidine	54827-17-7	0.05%
Stop Solution (6 ml)	Sulfuric Acid (H ₂ SO ₄ , 1 mol/L)	7664-93-9	1 mol/L

4. FIRST AID MEASURES

First aid personnel should ensure self-protection.

Swallowing / Ingestion: If any component of this kit is swallowed, wash the mouth out with water, provided the person is conscious. Get medical attention.

Skin Contact: If any component of this kit contacts the skin, immediately wash skin with soap and copious amounts of water.

Inhalation: If any component of this kit is inhaled, remove to fresh air. If not breathing, perform CPR and get immediate medical attention.

Eye Contact: If any component of this contacts the eyes, flush the eyes with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating eyelids with fingers. Consult a physician.

5. FIRE-FIGHTING MEASURES

5.1 Flammability: May be combustible at high temperatures.

5.2 Extinguishing Media: Use dry chemical.

5.3 Special Firefighting Procedures: Wear NIOSH/MSHA approved self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

5.4 Unusual Fire and Explosion Hazards: None known.

6. ACCIDENTAL RELEASE MEASURES

6.1 Spill Cleanup & Personal Precautions: Use appropriate personal protective equipment and methods to clean up spilled substances promptly. Collect and dispose of all waste in accordance with applicable laws.

6.2 Environmental Precautions: Do not allow product to reach groundwater, watercourse, or sewage system.

7. HANDLING AND STORAGE

7.1 Safe Handling Precautions: Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Material may be air-sensitive. Desiccation recommended.

7.2 Storage Conditions: The Standard, Detection Reagent A, Detection Reagent B, and the 96-well strip plate should be stored at -20°C upon being received. The other reagents (Wash Buffer, TMB Substrate, Stop Solution, Diluent Buffer) can be stored at 4°C.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control Parameters: ACGIH/OSHA Permissible Exposure Limit (PEL) Data: Not determined.

8.2 Personal Protective Equipment: Wear appropriate gloves, protective clothing, and safety eyewear and follow safe laboratory practices.

9. PHYSICAL AND CHEMICAL PROPERTIES

Component Group	Physical State & Appearance	Water Solubility & Properties
Antibody Coated Microwells	Solid (microwells)	Partially soluble
Detection Reagents A & B, Diluent Buffer	Aqueous solutions (Boiling point: Decomposes)	Solutions are dilutable / Miscible
30X Wash Buffer, TMB Substrate, Stop Solution	Clear solutions (Boiling point: Decomposes)	Solutions are dilutable / Miscible

10. STABILITY AND REACTIVITY

10.1 Chemical Stability: The product is stable under recommended storage conditions.

10.2 Conditions to Avoid: Not available / None known.

10.3 Materials to Avoid: Not available / None known.

10.4 Hazardous Decomposition Products: Not available / None known.

11. TOXICOLOGICAL INFORMATION

11.1 Toxicity Summary: Irritability: N/A. Mutagenicity: N/A. Reproduction toxicity: N/A. Carcinogenic effects data: N/A. Chronic effects of overexposure: N/A.

11.2 Human Toxic Effects: May cause slight irritation in case of eye contact, inhalation, skin contact, or ingestion.

12. ECOLOGICAL INFORMATION

Safeguard: Do not allow product to reach groundwater, watercourse, or sewage system.

13. DISPOSAL CONSIDERATIONS

Disposal Methods: Consult local, state, or national environmental regulations for proper disposal.

14. TRANSPORT INFORMATION

Overland Transportation (ADR/RID): As a mixture, the substance is subject to no limitations.

Transatlantic Transportation (IMDG): As a mixture, the substance is subject to no limitations.

Air Transportation (ICAO/IATA): As a mixture, the substance is subject to no limitations.

15. REGULATORY INFORMATION

15.1 General Chemical Safety Regulations: Observe the general safety regulations when handling chemicals. No single component contains a hazardous ingredient in an amount that requires identification and labeling under EC directives or national laws.

16. OTHER INFORMATION

16.1 Intended Use Notice: This material is sold for in vitro use or research purposes only. It is not for any human or animal therapeutic or clinical diagnostic use.

16.2 Disclaimer: Read instructions for use before using the product. Observe general safety regulations when handling chemicals. Good laboratory practice is the best preventive measure to avoid hazards. The information shall not be taken as being all-inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since our corporation cannot control the actual methods, volumes, or conditions of use, Biomatik Corporation shall not be held liable for any damages or losses resulting from handling or from contact with the product as described herein. This information is prepared on our present knowledge but shall not constitute a guarantee for any specific product features.

End of Safety Data Sheet