

SAFETY DATA SHEET

VERSION 5.0 | REVISED: 2026-09-22

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

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

1.2 Catalog Numbers Covered: EKU, EKN 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 Telephone / Contact: 1-519-489-7195 | Email: info@biomatik.com

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

Kit Component Summary:

Antibody Coated Microplate

Standard

Detection Reagent A

Detection Reagent B

Standard Diluent (contains ProClin 300)

Assay Diluent A (contains ProClin 300)

Assay Diluent B (contains ProClin 300)

Reagent Diluent (supplied when Detection Reagent A is lyophilized)

30X Wash Buffer

TMB Substrate

Stop Solution (contains 9.8% Sulfuric Acid)

2. HAZARDS IDENTIFICATION

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

2.1 Hazard Classification by Component

- **Standard / Assay Diluents (ProClin 300 @ 0.05%):** Skin Sensitization - Category 1 (H317: May cause an allergic skin reaction).
- **Stop Solution (Sulfuric Acid @ 9.8%):** Skin Corrosion/Irritation - Category 2 (H315: Causes skin irritation); Serious Eye Damage/Eye Irritation - Category 2A (H319: Causes serious eye irritation).
- **Other Kit Components:** Not classified as hazardous under GHS criteria.

2.2 GHS Label Elements & Precautionary Statements

Signal Word: WARNING

GHS Pictogram: [!] Exclamation Mark

Hazard Statements:

May cause an allergic skin reaction.



Causes skin irritation.
Causes serious eye irritation.

Precautionary Statements:

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
P264: Wash hands thoroughly after handling.
P272: Contaminated work clothing should not be allowed out of the workplace.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352: IF ON SKIN: Wash with plenty of soap and water.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue rinsing.
P321: Specific treatment (see Section 4).
P332+P313: If skin irritation occurs: Get medical advice/attention.
P333+P313: If skin irritation or rash occurs: Get medical advice/attention.
P337+P313: If eye irritation persists: Get medical advice/attention.
P362+P364: Take off contaminated clothing and wash it before reuse.

3. COMPOSITION / INFORMATION ON INGREDIENTS

The kit consists of individual aqueous solutions and solid components. Hazardous ingredients are detailed below:

Component	Chemical / Mixture	CAS No.	EC No.	Index No.	Conc. %
Diluents (Standard, A, B)	ProClin 300 (Mixture of 5-Chloro-2-methyl-4- isothiazolin-3-one & 2- Methyl-4-isothiazolin-3- one)	96118-96-6	932-593-5	613-167-00-5	0.05%
Stop Solution	Sulfuric Acid (H ₂ SO ₄)	7664-93-9	231-639-5	016-020-00-8	9.8%
Stop Solution	Water (H ₂ O)	7732-18-5	231-791-2	—	90.2%

4. FIRST AID MEASURES

First aid personnel should ensure self-protection.

Inhalation: If inhaled, move the person into fresh air. If not breathing, perform CPR and immediately consult a physician.

Skin Contact: Immediately take off contaminated clothing or shoes. Wash off with soap and plenty of water for at least 15 minutes. Consult a physician if irritation or rash occurs.

Eye Contact: Flush eyes with copious amounts of water for at least 15 minutes, assuring adequate flushing by separating eyelids with fingers. Remove contact lenses if present and easy to do. Immediately consult a physician.

Ingestion: Do NOT induce vomiting unless directed by medical personnel. Never give anything by mouth to an unconscious person. Rinse mouth thoroughly with water. Immediately consult a physician and show product SDS.

5. FIRE-FIGHTING MEASURES

5.1 Suitable Extinguishing Media: Use dry chemical, carbon dioxide, alcohol-resistant foam, or water spray appropriate to surrounding environment.

5.2 Specific Hazards Arising from Chemical: May be combustible at high temperatures. Contact of Stop Solution (Sulfuric Acid) with metals may produce highly flammable hydrogen gas.

5.3 Hazardous Combustion Products: Thermal decomposition may release toxic and corrosive gases, including oxides of sulfur, nitrogen oxides (NO_x), carbon oxides, and hydrogen gas.

5.4 Protective Equipment for Firefighters: Wear NIOSH/MSHA-approved self-contained breathing apparatus (SCBA) and full protective clothing.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions & PPE: Use personal protective equipment (goggles, gloves, protective clothing). Avoid breathing vapors, mist, or gas. Ensure adequate ventilation.

6.2 Environmental Precautions: Prevent further leakage or spillage if safe to do so. Keep product away from drains, sewers, surface water, and groundwater.

6.3 Clean-Up Methods & Containment: Soak up spill with inert absorbent material (e.g., sand, silica gel, acid binder, universal binder) and place into suitable, closed containers for disposal as hazardous waste.

7. HANDLING AND STORAGE

7.1 Safe Handling Precautions: Avoid contact with skin, eyes, and clothing. Avoid inhalation of vapor or mist. Wash hands thoroughly after handling. Use normal preventive fire protection measures.

7.2 Storage Conditions: Store all kit components according to individual product specifications and label instructions. Keep containers tightly closed in a dry, cool, and well-ventilated place.

7.3 Incompatible Materials: For Stop Solution: Avoid contact with bases, halides, metals, alkalis, and organic materials.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control Parameters: Contains no substances with occupational exposure limit values established by regional regulatory bodies.

8.2 Engineering Controls: Use in well-ventilated areas. Ensure eyewash stations and safety showers are close to the workstation location.

- **Eye/Face Protection:** Wear government-approved safety goggles or face shield.
- **Skin & Body Protection:** Wear chemical-resistant gloves (e.g., nitrile, neoprene) and long-sleeved laboratory coat or protective apron.
- **Respiratory Protection:** In case of inadequate ventilation, use a suitable respirator tested and approved under appropriate standards (NIOSH/CEN).
- **Hygiene Measures:** Wash hands thoroughly after handling and before eating, smoking, or using restrooms. Remove and wash contaminated clothing before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Property	Standard / Diluents (ProClin)	Stop Solution (Sulfuric Acid)	Other Liquid Reagents
Appearance	Colorless liquid	Colorless liquid	Clear / Colorless liquid
Odor / Odor Threshold	N/A	N/A	N/A
pH	N/A	< 2.0 (Acidic)	N/A
Melting / Freezing Point	N/A	N/A	N/A
Boiling Point / Range	N/A	N/A	N/A
Flash Point	N/A	N/A	N/A
Flammability (solid, gas)	N/A	N/A	N/A
Vapor Pressure / Density	N/A	N/A	N/A
Solubility	Miscible in water	Miscible in water	Miscible in water
Autoignition / Decomposition	N/A	N/A	N/A

10. STABILITY AND REACTIVITY

10.1 Chemical Stability: Stable under recommended storage conditions.

10.2 Conditions to Avoid: Heat, moisture, incompatible materials. Addition of water to Stop Solution liberates excessive heat.

10.3 Incompatible Materials: For Stop Solution: Most metals, oxidizers, reducers, bases, metal carbonates, cyanides, sulfides, carbides, oxides, metal acetylides, hydrides, halogens, perchlorates, acetonitrile, permanganates, alcohols, picrates. For Diluents: Strong acids/alkalis, strong oxidizing/reducing agents.

10.4 Hazardous Decomposition Products: Thermal decomposition liberates oxides of sulfur, nitrogen oxides, carbon oxides, and flammable hydrogen gas (upon contact of acid with metals).

11. TOXICOLOGICAL INFORMATION

11.1 ProClin 300 Components (0.05% in Diluents):

Classified based on available component data. May cause an allergic skin reaction (Skin Sens. 1).

Carcinogenicity: No component of this product present at levels greater than or equal to 0.1% is identified as a probable, possible, or confirmed human carcinogen by IARC, ACGIH, NTP, or OSHA.

11.2 Stop Solution (9.8% Sulfuric Acid):

Acute Toxicity: Inhalation of mist/vapors is corrosive and can cause severe irritation or damage to respiratory tract. Ingestion causes severe pain, nausea, vomiting, and potential gastrointestinal tract damage.

Skin Corrosion / Irritation: Causes skin irritation (Category 2).

Serious Eye Damage / Irritation: Causes serious eye irritation (Category 2A).

Aspiration Hazard: Can cause severe damage if aspirated.

12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity (Diluents): The environmental impact of ProClin 300 components has not been fully investigated.

12.2 Ecotoxicity (Stop Solution): Stop Solution (Sulfuric Acid) affects local aquatic pH factor, causing harmful effects to aquatic organisms.

12.3 Persistence / Bioaccumulation / Mobility: No specific data available.

13. DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods: Dispose of waste in accordance with applicable national, regional, state, or local environmental regulations. Do not dispose into drains or sewers.

13.2 Contaminated Packaging: Dispose of contaminated packaging in the same manner as unused product.

14. TRANSPORT INFORMATION

Classified according to UN Model Regulations, IMDG Code, ADR, RID, DOT, and IATA criteria:

Overland Transportation (ADR/RID): Not regulated.

Transatlantic Transportation (IMDG): Not dangerous according to specifications / Not a marine pollutant.

Air Transportation (ICAO/IATA): Not regulated.

15. REGULATORY INFORMATION

Complies with Regulation (EC) No 1272/2008 [CLP/GHS] and Regulation (EC) No 453/2010.

15.1 US Federal & State Regulations:

- **TSCA (Toxic Substances Control Act):** All active chemical components (Sulfuric Acid, Water) are listed on the TSCA Inventory.
- **SARA 313 Components:** Not applicable for kit diluents.
- **SARA 311/312 Hazards:** Acute Health Hazard (Sulfuric Acid).
- **CERCLA Reportable Quantity:** Sulfuric Acid: 1,000 lbs.
- **California Proposition 65:** This product contains no chemicals known to the State of California to cause cancer, birth defects, or reproductive toxicity.

16. OTHER INFORMATION

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

16.2 Disclaimer: The information provided in this SDS 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 Safety Data Sheet