

SAFETY DATA SHEET

VERSION 5.0 | REVISED: 2026-09-22

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

- 1.1 Product Name:** Cell-Based ELISA Kits, Cell-Based Components
- 1.2 Catalog Numbers Covered:** EKA, CB and CBP 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

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200) and GHS regulations.

2.1 Hazard Classification by Component

- **Sulfuric Acid (Stop Solution):** Corrosive to Metals (Category 1, H290); Skin Corrosion (Category 1A, H314); Serious Eye Damage (Category 1, H318).
- **Hydrogen Peroxide (Quenching Buffer):** Acute Toxicity, Oral (Category 4, H302); Skin Irritation (Category 2, H315); Serious Eye Damage (Category 1, H318); STOT Single Exposure (Category 3, Respiratory, H335); Aquatic Hazard Acute (Category 2, H401) / Chronic (Category 3, H412).
- **Kathon CG/ICP (10X TBS, 15X Wash, Diluents):** Skin Corrosion (Category 1C, H314); Serious Eye Damage (Category 1, H318); Skin Sensitisation (Category 1, H317); Aquatic Hazard Acute (Category 1, H400) / Chronic (Category 1, H410).
- **Triton X-100 (Blocking Buffer, Diluents):** Acute Toxicity, Oral (Category 4, H302); Skin Irritation (Category 2, H315); Serious Eye Damage (Category 1, H318); Aquatic Hazard Acute (Category 1, H400) / Chronic (Category 1, H410).
- **Sodium Dodecyl Sulfate (SDS Solution):** Flammable Solid (Category 2, H228); Acute Toxicity, Oral/Inhalation (Category 4, H302+H332); Skin Irritation (Category 2, H315); Serious Eye Damage (Category 1, H318); STOT Single Exposure (Category 3, Respiratory, H335); Aquatic Hazard Acute (Category 2, H401) / Chronic (Category 3, H412).
- **Crystal Violet Solution:** Acute Toxicity, Oral (Category 4, H302); Serious Eye Damage (Category 1, H318); Carcinogenicity (Category 2, H351); Aquatic Hazard Acute (Category 1, H400) / Chronic (Category 1, H410).
- **Sodium Azide (Primary Antibodies):** Acute Toxicity, Oral/Inhalation/Dermal (Category 1/2, H300+H310+H330); STOT Repeated Exposure, Oral (Category 2, Brain, H373); Aquatic Hazard Acute (Category 1, H400) / Chronic (Category 1, H410).

2.2 GHS Label Elements & Precautionary Statements

Signal Words: DANGER / WARNING

GHS Pictograms: [!] Exclamation Mark, Corrosion, Health Hazard, Flame



Hazard Statements:

H228: Flammable solid.
 H290: May be corrosive to metals.
 H300 + H310 + H330: Fatal if swallowed, in contact with skin, or if inhaled.
 H302 + H332: Harmful if swallowed or if inhaled.
 H314: Causes severe skin burns and eye damage.
 H315: Causes skin irritation.
 H317: May cause an allergic skin reaction.
 H318: Causes serious eye damage.
 H335: May cause respiratory irritation.
 H351: Suspected of causing cancer.
 H373: May cause damage to organs (Brain) through prolonged or repeated exposure if swallowed.
 H410: Very toxic to aquatic life with long lasting effects.
 H412: Harmful to aquatic life with long lasting effects.

Precautionary Statements:

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
 P264: Wash skin thoroughly after handling.
 P270: Do not eat, drink or smoke when using this product.
 P272: Contaminated work clothing should not be allowed out of the workplace.
 P273: Avoid release to the environment.
 P280: Wear protective gloves/protective clothing/eye protection/face protection.
 P301+P310+P330: IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth.
 P302+P352: IF ON SKIN: Wash with plenty of soap and water.
 P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P310: Immediately call a POISON CENTER or doctor.
 P333+P313: If skin irritation or rash occurs: 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 sub-components. Chemical ingredients are detailed below:

Chemical Name	CAS No.	% Weight / Concentration	Associated Kit Component
Sodium Azide	26628-22-8	< 0.1%	Primary Antibodies
Kathon CG/ICP	26172-55-4	0.2% - 2.5%	10X TBS, 15X Wash, Antibody Diluents
Tween-20	9005-64-5	0.1% - 1.8%	15X Wash Buffer, Diluents
Sodium Dodecyl Sulfate (SDS)	151-21-3	1.0%	SDS Solution
Triton X-100	9002-93-1	0.5% - 1.0%	Blocking Buffer, Primary Diluent

Hydrogen Peroxide (H ₂ O ₂)	7722-84-1	< 0.02% - 1.0%	Quenching Buffer, Ready-to-Use Substrate
Crystal Violet	548-62-9	0.05%	Crystal Violet Solution
3,3',5,5'-Tetramethylbenzidine (TMB)	54827-17-7	< 0.1%	Ready-to-Use Substrate
Sulfuric Acid (H ₂ SO ₄)	7664-93-9	2N (< 20%)	Stop Solution

4. FIRST AID MEASURES

Eye Contact: Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes.

Skin Contact: Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.

Inhalation: Move to fresh air. If not breathing, perform artificial respiration and get immediate medical attention.

Ingestion: Clean mouth with water. Drink plenty of water. Do NOT induce vomiting unless directed by medical personnel. Call a POISON CENTER or physician if you feel unwell.

Notes to Physician: Treat symptomatically.

5. FIRE-FIGHTING MEASURES

5.1 Flammable Properties: Not flammable.

5.2 Extinguishing Media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment (water spray, dry chemical, carbon dioxide).

5.3 Explosion Data: Sensitivity to Mechanical Impact: None. Sensitivity to Static Discharge: None.

5.4 Protective Equipment for Firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions: Ensure adequate ventilation. Use personal protective equipment (see Section 8).

6.2 Environmental Precautions: Try to prevent the material from entering drains or water courses.

6.3 Containment and Clean-Up: Prevent further leakage or spillage if safe to do so. Pick up and transfer to properly labeled containers for disposal.

7. HANDLING AND STORAGE

7.1 Handling: Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes, and clothing. Avoid inhalation.

7.2 Storage Conditions: Store the entire kit at 4°C upon arrival.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Exposure Guidelines: This product does not contain any hazardous materials with occupational exposure limits established by region-specific regulatory bodies.

8.2 Engineering Measures: Showers, eyewash stations, and adequate ventilation systems.

- **Eye / Face Protection:** Safety eyewear / chemical goggles complying with approved standards.
- **Skin & Body Protection:** Protective chemical-resistant gloves and suitable protective clothing.
- **Respiratory Protection:** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA-approved respiratory protection should be worn.
- **Hygiene Measures:** Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink, or smoke at working site.

9. PHYSICAL AND CHEMICAL PROPERTIES

Property	Value	Property	Value
Appearance / Form	Liquid solutions	Vapor Pressure	No data available
Odor	No data available	Vapor Density	No data available
Odor Threshold	No data available	Relative Density	No data available
pH	No data available	Water Solubility	Miscible in water
Melting / Freezing Point	No data available	Partition Coefficient	No data available
Boiling Point / Range	No data available	Auto-ignition Temperature	No data available
Flash Point	No data available	Decomposition Temperature	No data available
Evaporation Rate	No data available	Viscosity	No data available
Flammability (solid, gas)	No data available	Explosive Properties	No data available
Upper / Lower Flammability	No data available	Oxidizing Properties	No data available

10. STABILITY AND REACTIVITY

- 10.1 Stability:** Stable under recommended storage conditions.
- 10.2 Incompatible Products:** None known based on information supplied.
- 10.3 Conditions to Avoid:** None known based on information supplied.
- 10.4 Hazardous Decomposition Products:** None known based on information supplied.
- 10.5 Hazardous Polymerization:** Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION

- 11.1 Acute Toxicity:** Inhalation: No data available. Dermal: No data available.
- 11.2 Skin Corrosion / Eye Irritation:** No data available.
- 11.3 Serious Eye damage/eye irritation:** No data available.
- 11.4 Respiratory or skin sensitization:** No data available.
- 11.5 Germ cell mutagenicity:** No data available.
- 11.6 Carcinogenicity:** No data available.

11.7 Reproductive Toxicity: No data available

11.8 Aspiration Hazard: No data available.

12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity: The environmental impact of this product has not been fully investigated. Contains ingredients (Kathon CG/ICP, Triton X-100, Crystal Violet, Sodium Azide) that are very toxic to aquatic life with long-lasting effects.

13. DISPOSAL CONSIDERATIONS

13.1 Product Disposal: Offer surplus and non-recyclable solutions to a licensed disposal company. Observe all national, regional, and local regulations.

13.2 Contaminated Packaging: Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US): Not dangerous goods.

IMDG: Not dangerous goods.

IATA: Not dangerous goods.

15. REGULATORY INFORMATION

15.1 U.S. Federal Regulations:

- **SARA 302/313 Components:** The following components are subject to reporting levels established by SARA Title III, Section 302/313: Sodium azide, Kathon CG/ICP, Tween-20, SDS, Triton X-100, Hydrogen peroxide, Crystal violet, TMB, Sulfuric acid.
- **SARA 311/312 Hazard Categories:** Acute Health Hazard: No. Chronic Health Hazard: No. Fire Hazard: No. Sudden Release of Pressure Hazard: No. Reactive Hazard: No.
- **Clean Water Act:** This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).
- **CERCLA:** This material, as supplied, does not contain any substances regulated as hazardous substances under CERCLA (40 CFR 302) or SARA (40 CFR 355).
- **California Proposition 65:** This product does not contain any Proposition 65 chemicals.

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: The information provided in this Safety Data Sheet is correct to the best of our knowledge, information, and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal, and release and is not to be considered 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 materials or in any process, unless specified in the text.

End of Safety Data Sheet



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