

ImmunoDetector AEC HRP Detection System Safety Data Sheet

SECTION 1: IDENTIFICATION OF THE MIXTURE AND OF THE COMPANY

1.1 Product identifier

Product: ImmunoDetector AEC HRP Detection Systems

Catalog Numbers:

Catalog #	Presentation	Volume
BSB 0002	Mouse/Rabbit ImmunoDetector AEC HRP Red	15 mL
BSB 0002S	Mouse/Rabbit ImmunoDetector AEC HRP Red	5 mL
BSB 0004	Mouse/Rabbit ImmunoDetector AEC HRP Red	50 mL
BSB 0006	Mouse/Rabbit ImmunoDetector AEC HRP Red	100 mL
BSB 0008	Mouse/Rabbit ImmunoDetector AEC HRP Red	200 mL
BSB 0010	Mouse/Rabbit ImmunoDetector AEC HRP Red	1000 mL

2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use: Immunochemical reagent/ancillary reagent for *in vitro* diagnostics.
Not intended for use in humans or animals.

3. Details of the supplier of the safety data sheet

Manufacturer Bio SB, Inc.
Street Address 5385 Hollister Ave. Building 8, Suite #108
City, State, Zip, Country Santa Barbara, CA USA 93111, USA
Technical Phone: +1-805-692 2768
Fax: +1-805-692 2769
E-mail: sales@biosb.com

4 Emergency telephone number

Telephone number: +1-805-692 2768 (9 AM - 5 PM PST, M-F)

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the mixture

According to OSHA Hazard Communication Standard (29 CFR 1910.1200) this mixture is classified as non-hazardous based on the physical and/or chemical nature and/or concentration of ingredients.

Classification (EC 1272/2008): The product is classified in accordance with Regulation (EC) No 1272/2008 (GHS/CLP)

Classification system: The classification was made according to the latest editions of international substances lists and expanded upon from company and literature data.

2.2 Label elements

ImmunoDetector AEC HRP Detection System Safety Data Sheet



Label in Accordance With (EC) No. 1272/2008 (GHS/CLP)

Hazard Pictograms: GHS08

Signal Word: Danger

Hazard Statements:

H350 May cause cancer

Precautionary Statements: Restricted to professional users.

Prevention:

P201 Obtain special instructions before use.

P308+P313 IF exposed or concerned: Get medical advice/attention.

Storage:

P405 Store locked up

P501 Dispose of contents and container in accordance with all local, regional, national and international regulations.

Classification system:

NFPA Scale: 0 - 4		
HMIS (U.S.A.) Scale: 0 - 4	HEALTH	2
	FLAMMABILITY	0
	PHYSICAL HAZARD	0
	PERSONAL PROTECTION	B

2.3 Other information

Hazards not otherwise classified: Hazards not otherwise classified (HNOC) or not covered by GHS- non known

The Full Text for all Hazard Statements are displayed in Section 16. There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and do not require report in this section. Occupational exposure limits, if available, are listed in Section 8.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Chemical Description: Immunochemical reagent / auxiliary reagent. Mixture preserved with Bronidox L as an antimicrobial agent. Mixture of the substances listed below plus non-hazardous additions.

ImmunoDetector AEC HRP Detection System Safety Data Sheet

Component	Chemical Name	% Conc.	CAS#	EC#	Classification	Classification kit
5-Bromo-5-nitro-1,3-dioxane	Bronidox L	<0.1	30007-47-7	250-001-7	Acute toxicity, Oral (Category 4), H302, Skin irritation (Category 2), H315 Serious eye damage (Category 1), H318 Specific target organ toxicity - repeated exposure (Category 2), H373 Short-term (acute) aquatic hazard (Category 3), H402 Long-term (chronic) aquatic hazard (Category 3), H412	Not subject to classification in this product mixture and concentration
AEC (C ₁₄ H ₁₄ N ₂)	3-amino 9-ethylcarbazole	≥0.1-<1	132-32-1	205-057-7	Carc. 1B, H350	Carc. 1B, H350
Immuno Detector Peroxidase Blocker	H ₂ O ₂	>2<5	0007722-84-1	231-765-0	H271 Acute Tox. 4; H332 Acute Tox. 4; H302 Skin Corr. 1A; H314	H271 Acute Tox. 4; H332 Acute Tox. 4; H302 Skin Corr. 1A; H314
ImmunoDetector Label	Methylisothiazolone	<0.1	2682-20-4	220-239-6	Skin corr. 1B, Skin sensit. 1, Spec.targ. org. tox. - single exp. 3, Acute aq. tox. 1; H302, H314, H317, H331, H335, H400	Not subject to classification in this product mixture and concentration
	Bronidox L	<0.1	30007-47-7	250-001-7	see above	Not subject to classification in this product mixture and concentration
ImmunoDetector Link	Methylisothiazolone	<0.1	2682-20-4	220-239-6	Skin corr. 1B, Skin sensit. 1, Spec.targ. org. tox. - single exp. 3, Acute aq. tox. 1; H302, H314, H317, H331, H335, H400	Not subject to classification in this product mixture and concentration
	Bronidox L	<0.1	30007-47-7	250-001-7	see above	Not subject to classification in this product mixture and concentration

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and do not require report in this section. Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance.

Inhalation: In case of inhalation of spray mist: Move person into fresh air and keep at rest. Get medical attention if any discomfort continues. If breathing stops, provide artificial respiration. Get medical attention immediately!

Ingestion: Immediately rinse your mouth and drink plenty of water (200-300 ml).
DO NOT INDUCE VOMITING! NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Get medical attention.

ImmunoDetector AEC HRP Detection System Safety Data Sheet

Skin contact:	Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention promptly if symptoms occur after washing. Generally, the product does not irritate the skin.
Eye contact:	Promptly wash eyes with plenty of water while lifting the eyelids. Make sure to remove any contact lenses from the eyes before rinsing. Continue to rinse for at least 15 minutes. Obtain medical attention and bring these instructions.
Self-protection of the first aider:	Use personal protective equipment as required.

4.2. Most important symptoms and effects, both acute and delayed

Inhalation:	May cause coughing or mild irritation
Ingestion:	May cause discomfort if swallowed
Skin contact:	Prolonged skin contact may cause redness and irritation
Eye contact:	May cause temporary eye irritation

4.3. Indication of any immediate medical attention and special treatment needed

If seeking medical attention show Safety Data Sheet to physician. Treat Symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media: Fire can be extinguished using: Product itself does not burn. For this mixture no limitations of extinguishing agents are given. Use fire fighting measures that suit the environment.

5.2. Special hazards arising from the substance or mixture

Specific hazards: The product is non-combustible. If heated, irritating vapors may be formed. Hydrogen chloride (HCl). When heated and in case of fire, very toxic nitrogen oxides (NOx) are formed.

5.3. Advice for firefighters

Protective equipment for fire-fighters: Self-contained NIOSH/MSHA (approved or equivalent) breathing apparatus and full protective chemical resistant clothing, gloves, and eye protection must be worn. In case of fire, use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Minimize direct contact with skin or eyes and prevent inhalation. Stop the leak if possible without any risk. Remove or isolate all sources of ignition. For personal protection see section 8.

6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not allow it to enter drains, sewers or watercourses.

ImmunoDetector AEC HRP Detection System Safety Data Sheet

6.3. Methods and material for containment and cleaning up

Absorb spillage with suitable absorbent material. Collect spillage in suitable waste containers, seal securely and deliver for disposal according to local regulations. Flush with plenty of water to clean the spillage area. Do not contaminate water sources or sewer.

6.4. Reference to other sections

Wear protective clothing as described in Section 8 of this safety data sheet. For waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded. Avoid inhalation of vapors/spray and contact with skin and eyes. Wash contaminated clothing before reuse. For precautions see section 2.

7.2. Conditions for safe storage, including any incompatibilities

Store in a tightly closed original container in a dry, cool and well-ventilated place. Refer to the product label.

Storage Class (TRGS 510): Please see the respective national guidelines.

Store at 2-8°C.

Information about storage in one common storage facility: For this mixture no further information available.

Further information about storage conditions:

Store in a locked cabinet or with access restricted to technical experts or their assistants.

Protect from the effects of light.

The indications are valid for the whole package.

Storage class Please see the respective national guidelines.

7.3. Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Components with workplace control parameters:

Name: None

Workplace Exposure Limit: Not applicable

8.2. Exposure controls

Protective equipment: Impermeable gloves and Chemical splash safety glasses when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.

Process conditions: Provide eyewash station.

Engineering measures: Provide adequate ventilation. Observe occupational exposure limits and minimize the risk of inhalation of spray.

ImmunoDetector AEC HRP Detection System Safety Data Sheet

Respiratory equipment:	No specific recommendation made, but if risk assessment shows air purifying respirators are appropriate, use masks with approved filters. Use only devices approved by competent authorities like NIOSH (USA) and CEN (EU). Respiratory protection must be used if the general level exceeds the recommended occupational exposure limit.
Hand protection:	Use suitable chemical resistant protective gloves if risk of skin contact. The most suitable glove must be chosen in consultation with the glove's supplier, who can inform you about the breakthrough time of the glove material. Frequent change is advisable. Latex or Nitrile gloves; thickness 0.11 mm, ASTM F1671, DIN EN 374 or equivalent; AQL 1.5.
Hygiene measures:	DO NOT SMOKE IN WORK AREA! Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes wet or contaminated. Promptly remove any clothing that becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.
Eye protection:	If there is a risk of splashing, wear safety goggles or face shields. DIN 166 or equivalent.
Skin protection:	Wear an apron or protective clothing in case of contact. Wash contaminated clothing before reuse. Wash thoroughly after handling.
Control of Environmental Exposure:	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance:	Liquid
Color:	red (AEC), clear (Peroxidase Blocker), orange (Label), yellow (Link)
Odor:	Odorless
Odor Threshold:	Not determined
pH Value:	No data available
Initial boiling point and boiling range:	No data available for this concentration range
Melting point (°C):	No data available
Flash Point:	Not determined
Evaporation rate	Not determined
Flammability Limit –(solid/gas):	Mixture is not inflammable
Upper /Lower Flammability Limit (%):	Not applicable
Vapor density (air=1):	Not determined
Vapor pressure:	Not determined
Relative density:	Not determined
Solubility:	Soluble in water
Solubility Value (G/100G H ₂ O@20°C):	Miscible
Partition Coefficient (N-Octanol/Water):	No data available
Auto Ignition Temperature (°C):	No data available
Decomposition temperature (°C):	No data available

ImmunoDetector AEC HRP Detection System Safety Data Sheet

Explosive properties:	No further relevant information available
Oxidizing properties:	No data available
Solvent content:	
Organic solvents:	0 %
Water:	≥99 %
Solids content:	≥0.1 - <1 %

9.2. Other information: No further relevant information available

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity:	There are no known reactivity hazards for these concentrations when handling the product according to its intended use.
10.2. Chemical stability:	May darken on storage. Stable under normal temperature conditions.
10.3. Possibility of hazardous reactions:	Dangerous reactions are not to be expected for these concentrations when handling the product according to its intended use.
10.4. Conditions to avoid:	Avoid exposure to fire, static electricity, or direct sunlight.
10.5. Incompatible materials:	Strong oxidizing agents.
10.6. Hazardous decomposition products	In case of fire of large quantities: See Section 5.
Additional information:	No further relevant information available.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects:	
Toxicological information	No information available
Acute toxicity:	Based on available data, the classification criteria are not met.
Dermal:	No data available
Skin Corrosion/Irritation:	May be irritating to skin and mucous membranes.
Human Skin Model Test:	No data available
Serious eye damage/irritation:	Slight irritations possible.
Respiratory sensitization:	Based on available data, the classification criteria are not met.
Skin sensitization:	No sensitizing effect known.
Germ cell mutagenicity (InVitro):	No data available
Carcinogenicity:	No data available
Reproductive Toxicity – Fertility:	No data available
Specific target organ toxicity - single exposure:	
STOT - Single exposure:	Based on available data, the classification criteria are not met.
Specific target organ toxicity - repeated exposure:	

ImmunoDetector AEC HRP Detection System Safety Data Sheet

STOT - Repeated exposure:	Not determined Aspiration hazard: Based on available data, the classification criteria are not met.
Viscosity:	Not determined
Inhalation:	In high concentrations, vapors may irritate throat and respiratory system and cause coughing.
Ingestion;	Harmful if swallowed.
Skin contact:	Liquid may irritate skin. Not a skin sensitizer.
Eye contact:	Spray and vapor in the eyes may cause irritation and smarting.
Health Warnings:	Known or suspected mutagen. Known or suspected carcinogen for humans.
Route of entry:	Ingestion. Skin and/or eye contact.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Ecotoxicity

Toxicological information:

Acute toxicity:

Other

No data available on the ecotoxicity of this product.

Aquatic toxicity: No further relevant information available.

12.2. Persistence and degradability

Degradability:

No data available on the degradability of this product. This product is expected to be not readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential:

No data available on bioaccumulation. The product does not contain any substances expected to be bioaccumulating.

Partition coefficient:

Not determined.

12.4. Mobility in soil

Mobility:

No relevant information available.

Additional ecological information:

General notes:

Water danger class 3 (Self-assessment): extremely hazardous for water. Do not let enter drains.

12.5. Results of PBT and vPvB assessment

This mixture is not expected to contain any substances assessed to be a PBT or vPvB.

12.6. Other adverse effects

SVHC not applicable.

SECTION 13: DISPOSAL CONSIDERATIONS

ImmunoDetector AEC HRP Detection System Safety Data Sheet

General information Waste is classified as hazardous waste. Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority.

13.1. Waste treatment methods

Waste Disposal Methods: Dispose of waste and residues in accordance with local authority requirements.

Product/Packaging Disposal: Decisions on the appropriate waste management method must be in line with local, regional and national regulations.

SECTION 14: TRANSPORTATION INFORMATION

General: This substance is considered to be non-hazardous for transport (including air transport). The product is not covered by international regulation on the transport of dangerous goods [IMDG, IATA, ADR/RID, DOT (US)].

14.1. UN number

ADR ADN, IMDG, IATA Not applicable.

14.2. UN proper shipping name

ADR, ADN, IMDG, IATA Not applicable.

14.3. Transport hazard class(es) - if shipped as a part of a kit :

Not applicable.

14.4. Packing group

ADR, ADN, IMDG, IATA Not applicable.

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant: No.

14.6. Special precautions for user

Not applicable

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable.

Transport/Additional information: Not classified as dangerous in the meaning of transport regulations as issued in the latest version.

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Labelling according to Regulation (EC) No 1272/2008 See Section 2.

Directive 2012/18/EU: Named dangerous substances - ANNEX I Contains none of the listed substances.

REGULATION (EC) No 1907/2006 REACH ANNEX XVII Conditions of restriction: None classified.

ImmunoDetector AEC HRP Detection System Safety Data Sheet

Approved Code of Practice: Classification and Labeling of Substances and Preparations Dangerous for Supply. Safety Data Sheets for Substances and Preparations.
Guidance Notes: Workplace Exposure Limits EH40.

SARA 302 /304 Components

Classification: This material does not contain any chemical components with known CAS numbers that exceed the threshold (DeMinimus) reporting levels established by SARA Title III, Section 302/304.

SARA 311/ 312 Components

Classification: This material does not contain any chemical components with known CAS numbers that exceed the threshold (DeMinimus) reporting levels established by SARA Title III, Section 311/312.

SARA 313 Components

Classification: This material does not contain any chemical components with known CAS numbers that exceed the threshold (DeMinimus) reporting levels established by SARA Title III, Section 313.

SARA 355 (extremely hazardous substances): None of the ingredients are listed.

Toxic substances control Act; TSCA 8 (a) CDR Exempt/Partial Exemption: Not determined.

Clean Water Act (CWA (33 U.S.C. § 1321)) 311: All of the components of this mixture are listed.

Clean Air Act (CAA) 112 regulated toxic substances: Not determined

California Prop 65: This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

Massachusetts: No components are subject to the Massachusetts Right to Know Act.

New Jersey: The following components are listed 5-Bromo-5-nitro-1,3-dioxane CAS-No.30007-47-7

Pennsylvania: The following components are listed 5-Bromo-5-nitro-1,3-dioxane CAS-No.30007-47-7

EU Legislation

Regulation (EU) No 453/2010 of 20 May 2010 Annex II and Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labeling and packaging of substances and mixtures, and amending Regulation (EC) No 1907/2006 with amendments. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), establishing a European Chemicals Agency and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

15.2. Chemical Safety Assessment No chemical safety assessment has been carried out by Bio SB.

SECTION 16: OTHER INFORMATION

Abbreviations and Acronyms:
OSHA (USA) Occupational Safety and Health Administration

ImmunoDetector AEC HRP Detection System Safety Data Sheet

NFPA	National Fire Protection Association
H.M.I.S (USA)	Hazardous Material Identification System
SARA	Superfund Amendments and Reauthorization Act
IMDG	International Maritime Organization
IATA	International Air Transportation Association
ADR/RID	European Agreements Concerning the International Carriage of Dangerous Goods by Rail (RID) and by Road (ADR)
DOT (US)].	U.S Department of Transportation
GHS:	Globally Harmonised System of Classification and Labelling of Chemicals
EINECS:	European Inventory of Existing Commercial Chemical Substances
ELINCS:	European List of Notified Chemical Substances
CAS:	Chemical Abstracts Service (division of the American Chemical Society)
DNEL:	Derived No-Effect Level (REACH)
PNEC:	Predicted No-Effect Concentration (REACH)
PBT:	Persistent, Bioaccumulative and Toxic
SVHC:	Substances of Very High Concern
vPvB:	very Persistent and very Bioaccumulative

General information: Only trained personnel should use this material

SDS00045 Version: 1

Date: 03/16/2021

Disclaimer

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy him or herself as to the suitability of such information for their own particular use.

Bio SB shall not be held responsible for any damage resulting from the use of the above product or the information contained in this safety data sheet.

Bio SB, Inc.
5385 Hollister Avenue, Building 8, Suite #108 Santa Barbara, CA 93111, USA
Tel. (805) 692-2768 · Tel. (800) 561-1145 · Fax. (805) 692-2769
E-mail: sales@biosb.com · Website: www.biosb.com