

PolyDetector HRP Yellow Safety Data Sheet

Section 1: Identification of the Mixture and of the Company

1.1 Product identifier

Catalog No.	Product Description	Volume
BSB-0365-15	PolyDetector HRP Yellow	15 mL
BSB-0365-50	PolyDetector HRP Yellow	50 mL
BSB-0365-100	PolyDetector HRP Yellow	100 mL
BSB-0365-200	PolyDetector HRP Yellow	200 mL
BSB-0365-500	PolyDetector HRP Yellow	500 mL
BSB-0365-1000	PolyDetector HRP Yellow	1000 mL

1.2 Relevant identified uses of the substance or mixture and uses advised against

Recommended use: Immunohistochemistry (IHC) reagents for *in vitro* diagnostics.
Not intended for use in humans or animals.

1.3 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

1.4 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 hazardous based on the physical and/or chemical nature and/or concentration of ingredients.

Acute toxicity, Oral (Category 4), H302
Skin irritation (Category 2), H315
Eye irritation (Category 2A), H319
Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335
Carcinogenicity (Category 1B), H350

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.




PROPRIETARY AND CONFIDENTIAL

Property of Bio SB. This document may not be copied, e-mailed or disclosed without the expressed written consent of executive management.

PolyDetector HRP Yellow Safety Data Sheet

2.2 Label elements

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

Hazard Pictograms:	GHS08			
Signal Word:	GHS07			
Hazard Statements:	H302 Harmful if swallowed H315 Causes skin irritation. H319 Causes serious eye irritation H335 May cause respiratory irritation. H350 Carcinogenicity			
Precautionary Statements:	Restricted to professional users.			
Prevention:	P201 Obtain special instructions before use P202 Do not handle until all safety precautions have been read and understood. 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. P271 Use only outdoors or in a well-ventilated area. P280 Wear protective clothing, gloves, wear eye and face protection.			
Response:	P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth. P302 + P352 IF ON SKIN: Wash with plenty of soap and water P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P332 + P313 If skin irritation occurs: Get medical advice/ attention. P308 + P313 IF exposed or concerned: Get medical advice/attention. P337 + P313 If eye irritation persists: Get medical advice/ attention. P362 Take off contaminated clothing and wash before reuse.			
Storage:	P403 + P233 Store in a well-ventilated place. Keep the container tightly closed. P405 Store locked up P501 Dispose of contents and container in accordance with all local, regional, national and international regulations			

Classification system: Hazardous to health or the environment and do not require report in this section. Occupational exposure limits, if available, are listed in Section 8.

2.3 Other information

Hazards not otherwise classified: Hazards not otherwise classified (HNOC) or not covered by GHS- None known

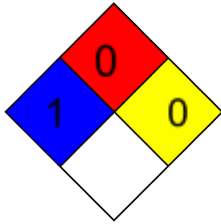
The Full Text for all Hazard Statements are displayed in Section 16. There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and do not require report in this section.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

PROPRIETARY AND CONFIDENTIAL

Property of Bio SB. This document may not be copied, e-mailed or disclosed without the expressed written consent of executive management.

PolyDetector HRP Yellow Safety Data Sheet

Section 3: Composition / Information on Ingredients

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

3.1 Chemical Description: mixture

Component	Chemical Name	Conc. %	CAS#	EC#	Classification (pure ingredient)	Classification kit
HRP Yellow Buffer	Bronidox L (5-Bromo-5-nitro-1,3-dioxane)	<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
HRP Yellow Chromogen	Proprietary	<10	N/A	N/A	Acute Tox. Oral 4; Eye Irrit. 2A; Muta. 2; Danger Carc. 1B; H302, H319, H341, H350 Warning Acute Tox. Oral 4; Eye Irrit. 2A; Muta. 2; Danger Carc. 1B; H302, H319, H341, H350	Acute Tox. Oral 4; Eye Irrit. 2A; Muta. 2; Danger Carc. 1B; H302, H319, H341, H350 Warning Acute Tox. Oral 4; Eye Irrit. 2A; Muta. 2; Danger Carc. 1B; H302, H319, H341, H350

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

PROPRIETARY AND CONFIDENTIAL

Property of Bio SB. This document may not be copied, e-mailed or disclosed without the expressed written consent of executive management.

PolyDetector HRP Yellow Safety Data Sheet

General advice:	Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
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.
Skin contact:	Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention promptly if symptoms occur after washing.
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

The most important known symptoms and effects are described in the labeling (see section 2.2) and/or in section 11.

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

If seeking medical attention, show a Safety Data Sheet to the physician. Treat symptomatically.

Section 5: Firefighting Measures

5.1. Extinguishing media

Suitable extinguishing media: Fire can be extinguished using: Water spray, alcohol resistance foam, carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Specific hazards: Emits toxic fumes and carbon oxides under fire conditions.

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.

5.4 Further Information: Water jets can be used successfully to cool containers exposed to the fire and disperse fumes.

Section 6: Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures

Minimize direct contact with skin or eyes and prevent inhalation. If in liquid form, blot with absorbing material, otherwise sweep up. Place collected material in a plastic bag and hold it for appropriate waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete. For personal protection see section 8.

6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not allow entering drains, sewers or watercourses. Keep material away from heat, flame, ignition sources, and reactive materials.

6.3. Methods and material for containment and cleaning up

PROPRIETARY AND CONFIDENTIAL

Property of Bio SB. This document may not be copied, e-mailed or disclosed without the expressed written consent of executive management.

PolyDetector HRP Yellow Safety Data Sheet

Ensure adequate ventilation. Absorb spillage with suitable inert absorbent material. Collect spillage in suitable waste containers, seal securely and deliver for disposal according to local regulations.

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

Avoid inhalation of vapors/spray and contact with skin and eyes. Avoid formation of dust and aerosols. Wash thoroughly after handling. Avoid prolonged or repeated exposure.

Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs.

Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.

7.2. Conditions for safe storage, including any incompatibilities

Store in a tightly closed original container in a dark, dry, cool and well-ventilated place. Refer to the product label.
 Store at 2-8°C.

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:

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

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 Safety showers and eyebaths. Mechanical exhaust required.

Engineering measures:

Provide adequate ventilation. Mechanical exhaust is required. Observe occupational exposure limits and minimize the risk of inhalation of spray.

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 there is a risk of skin contact. The most suitable glove must be chosen in consultation with the glove's supplier, who can inform 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.

Body protection:

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Eye/face protection:

If at risk of splashing, wear safety goggles or a face shield. 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.

PROPRIETARY AND CONFIDENTIAL

Property of Bio SB. This document may not be copied, e-mailed or disclosed without the expressed written consent of executive management.

PolyDetector HRP Yellow Safety Data Sheet

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:	Yellow/Brown Chromogen, clear and colorless (Buffer)
Odor:	odorless (Chromogen), odorless (other)
Odor Threshold:	Not determined
pH Value:	6.5 ± 0.5 (Buffer), Not determined (Chromogen)
Initial boiling point and boiling range:	Not determined
Melting point (°C):	Not determined
Flash Point:	Not applicable
Freezing Point:	Not determined
Evaporation rate	Not determined
Flammability Limit –(solid/gas):	Not applicable
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):	Not determined
Partition Coefficient (N-Octanol/Water):	Not determined
Auto Ignition Temperature (°C):	Not determined
Decomposition temperature (°C):	Not determined
Explosive properties:	Not applicable
Oxidizing properties:	Not determined

9.2. Other information: No further relevant information available

Section 10: Stability and Reactivity

10.1. Reactivity:	There are no known reactivity hazards associated with this product.
10.2. Chemical stability:	Stable under recommended storage 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 temperature fluctuations or direct sunlight.
10.5. Incompatible materials:	No relevant information available for these concentrations.
10.6. Hazardous decomposition products:	In case of fire of large quantities: See Section 5.
Additional information:	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11: Toxicological Information

11.1. Information on toxicological effects:
Toxicological information No information available.

PROPRIETARY AND CONFIDENTIAL

Property of Bio SB. This document may not be copied, e-mailed or disclosed without the expressed written consent of executive management.

PolyDetector HRP Yellow Safety Data Sheet

Acute toxicity:	Acute Toxicity (Oral LD50) Quantitative data about toxicity of this product not available
Dermal:	Not determined
Skin Corrosion/Irritation:	Not determined
Human Skin Model Test:	Not determined
Serious eye damage/irritation:	Not determined
Respiratory sensitization:	Not determined
Skin sensitization:	Not determined
Germ cell mutagenicity (InVitro):	No data available
Carcinogenicity	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC, NTP, or OSHA.
Reproductive Toxicity – Fertility:	No data available
Specific target organ toxicity - single exposure:	
STOT - Single exposure:	Not determined
Specific target organ toxicity - repeated exposure:	
STOT - Repeated exposure:	Not determined
Aspiration hazard:	
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:	Eye and nasal irritation, irritation of the throat, slight cough, headache; no significant pathological changes anticipated
Route of entry:	No known or suspected mutagen. No known or suspected carcinogen for humans Vapor. Inhalation or dermal contact during production. Ingestion. Skin and/or eye contact.

Section 12: Ecological Information

12.1 Ecotoxicity

Toxicological information:

Acute toxicity: No data available on the ecotoxicity of this product.

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:

The product is soluble in water.

PROPRIETARY AND CONFIDENTIAL

Property of Bio SB. This document may not be copied, e-mailed or disclosed without the expressed written consent of executive management.

PolyDetector HRP Yellow Safety Data Sheet

12.5. Results of PBT and vPvB assessment	PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.
12.6. Other adverse effects	Not determined.

Section 13: Disposal Considerations

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 regulated

14.4. Packing group

ADR, ADN, IMDG, IATA	Not regulated
----------------------	---------------

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant:	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal
---	--

14.6. Special precautions for user	Not applicable.
---	-----------------

14.7. Transport in bulk according to Annex II of MARPOL73/78 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.
--	--

14.8. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:

Not applicable

Section 15: Regulatory Information

PROPRIETARY AND CONFIDENTIAL

Property of Bio SB. This document may not be copied, e-mailed or disclosed without the expressed written consent of executive management.

PolyDetector HRP Yellow Safety Data Sheet

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 None classified.

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

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: No chemicals in this product are subject to reporting requirements.

SARA 311/ 312 Components

Classification: Acute health hazard, Chronic health hazard

SARA 313 Components

Classification: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) 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: No products were found.

Clean Air Act (CAA) 112 regulated toxic substances: No products were found.

California Prop 65: *Contains chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.*

Massachusetts: The following components are listed: 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 and proprietary components.

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

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

Full text of the classifications, including the indication of danger, and the hazard statements, if mentioned in section 2 or 3:

H271	May cause fire or explosion; strong oxidizer (Category 1),
H302	Harmful if swallowed (Category 4),
H314	Causes severe skin burns and eye damage (Category 1A, 1B, 1C),
H315	Causes skin irritation (Category 2),
H318	Causes serious eye damage (Category 1),
H319	Causes serious eye irritation (Category 2A),
H332	Harmful if inhaled (Category 4),
H335	May cause respiratory irritation (Category 3),

PROPRIETARY AND CONFIDENTIAL

Property of Bio SB. This document may not be copied, e-mailed or disclosed without the expressed written consent of executive management.

PolyDetector HRP Yellow Safety Data Sheet

H373	Causes damage to organs through prolonged or repeated exposure (Category 2),
H402	Acute aquatic hazard (Category 3),
H412	Harmful to aquatic life with long lasting effects (Category 3)
Abbreviations and Acronyms:	
OSHA (USA)	Occupational Safety and Health Administration
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
SDS No.: 00052	Version 1
Date:	08/12/2021

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