

ImmunoDNA Washer Safety Data Sheet

SECTION 1: IDENTIFICATION OF THE MIXTURE AND OF THE COMPANY

1.1 Product identifier

Product: **ImmunoDNA Washer 10X**
ImmunoDNA Washer 20X

Catalog Numbers:

Catalog #	Presentation	Volume
BSB 0029	ImmunoDNA Washer 10X	200 ml
BSB 0042	ImmunoDNA Washer 10X	1000 ml
BSB 0149	ImmunoDNA Washer 20X	200 ml
BSB 0150	ImmunoDNA Washer 20X	1000 ml

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

Recommended use:

A concentrated wash buffer for Immunohistochemistry (IHC) and in situ Hybridization (ISH) procedures. It can be used in autostainers, capillary action slides and manual staining procedures.

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: 69 Santa Felicia Dr.
 City, State, Zip, Country: Santa Barbara, CA 93117, 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 pure substance or mixture

The chemical dilutions in this product are not subject to classification or labeling according to United Nations (UN) GHS, United States Hazard Communication Standard (US HCS), related European Community (EC) 2008/1272/EC (EC CLP) guidelines and applicable analogous GHS-based global regulations. Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

2.2 GHS Label elements, including precautionary statements

GHS Label:

Hazard Pictograms:



Signal Word

Warning

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Hazard Statements

H302	Harmful if swallowed
H411	Toxic to aquatic life with long lasting effects
H315	Causes skin irritation

Precautionary statement(s)

P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P273	Avoid release to the environment.

2.3 Other information

Hazards not otherwise classified (HNOC) or not covered by GHS – none known

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Chemical Description: Mixture

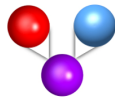
Component	Chemical Name	% Conc.	CAS#	EC#	FDA Substance Registration system UNII #	Raw material Classification (100 %) _ 29 CFR 1910.1200 (HCS); HPR (WHMIS 2015); 1272/2008/EC
Bronidox	5-Bromo-5-Nitro-1,3-dioxane	>1 % <5%	30007-47-7	250-001-7	U184I9QBNM	Not subject to classification in this product mixture and concentration

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 reporting 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. Move out of dangerous area.
Inhalation:	In case of inhalation of spray move person into fresh air. Treat symptomatically and supportively. Generally, this aqueous product is not a significant inhalation hazard in the kit volumes and concentrations present.
Ingestion:	Immediately rinse 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. If vomiting occurs, keep head lower than hips to prevent aspiration
Skin contact:	Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention promptly if symptoms occur after washing.



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Eye contact: Promptly wash eyes with plenty of water while lifting the eye lids. Make sure to remove any contact lenses from the eyes before rinsing. Continue to rinse for at least 15 minutes. Obtain medical attention, continue rinsing eyes during transport to hospital and bring these instructions.

Self-protection of the first aider: Use personal protective equipment as required. Medical monitoring not foreseen. No known Antidotes.

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

The most important known symptoms and effects are described in section 11.

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: Water spray, alcohol resistant foam, dry chemical or CO²

5.2. Special hazards arising from the substance or mixture

Specific hazards: No data available.

5.3. Advice for firefighters

Protective equipment for fire-fighters: 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

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

Absorb spillage with suitable inert 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 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.

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SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Avoid inhalation of vapors/spray and contact with skin and eyes. Wash contaminated clothing before reuse.

Do not eat, drink and smoke in the working areas. Wash hands with soap and water after handling the mixture. Remove contaminated clothing and protective equipment before entering eating areas.

7.2. Conditions for safe storage, including any incompatibilities

Refer to product label. Keep away from food and drinks.

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2, no other uses are stipulated.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Community/National occupational exposure limit values:	Not available
Community/National biological exposure limit values:	Not established.
DNEL values (components):	Not established.
PNEC values (components):	Not established.

The measurement of substances at the workplace must be carried out with standardized methods or, failing that, with appropriate methods.

8.2. Exposure controls

Protective equipment	Protective gloves, protective clothing, and safety glasses
Process conditions	Provide eyewash station.
Engineering measures	Handle in accordance with good industrial hygiene and safety practice.
Respiratory equipment	No specific recommendation made. Where risk assessment shows air-purifying respirators are appropriate, use masks with approved filter. Use only devices approved by the Competent Authorities such as NIOSH (USA) and CEN (EU).
Hand protection	Use suitable protective gloves if risk of skin contact. The most suitable glove must be chosen in consultation with the gloves' supplier, who can inform about the breakthrough time of the glove material.
Eye protection	Wear safety goggles.
Other Protection: Hygiene measures	Wear appropriate clothing to prevent any possibility of skin contact. DO NOT SMOKE IN WORK AREA! Wash hands at the end of each work shift and before eating, smoking and using the toilet.
Skin protection:	Wear apron or protective clothing in case of contact. Wash contaminated clothing before reuse.



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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:	clear
Odor:	none
Odor Threshold:	Not determined
pH Value:	7.5
Initial boiling point and boiling range:	Not determined
Melting point (°C):	Not determined
Flash Point:	Not applicable
Evaporation rate	Not determined
Flammability Limit –(solid/gas):	Not determined
Upper /Lower Flammability Limit (%):	Not determined
Vapor density (air=1):	Not determined
Vapor pressure:	Not determined
Relative density:	Not determined
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 determined
Oxidizing properties:	Does not meet the criteria for oxidizing

9.2. Other safety information None

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stable under normal temperature conditions.

10.3. Possibility of hazardous reactions

No relevant information available for these concentrations

10.4. Conditions to avoid

Avoid exposure to high temperatures or direct sunlight.

10.5. Incompatible materials

No relevant information available for these concentrations

10.6. Hazardous decomposition products

No relevant information available for these concentrations

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SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

The health effects of the product have not been thoroughly investigated. Data on toxicological effects of the hazardous ingredients are provided bellow.

Toxicological information

Acute toxicity:

Oral May be detrimental; if digested typically in quantities above those found in this mixture.

Skin Corrosion/Irritation:

May cause skin irritation.

Human Skin Model Test:

Not determined.

Serious eye damage/irritation:

Not determined.

Respiratory sensitization:

Not determined.

Skin sensitization:

Not determined.

Germ cell mutagenicity (InVitro):

Not determined.

Carcinogenicity:

No relevant information available for these concentrations
 No component of this product is identified as a known or anticipated carcinogen by IARC, OSHA and NTP.
 Not determined.

Reproductive Toxicity – Fertility:

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:

Not determined.

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:

No relevant information available for these concentrations

Route of entry:

Ingestion, skin and/or eye contact.

RTECS: JG9650000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity: There are no data on the ecotoxicity of this product.

12.1. Toxicity

Acute Toxicity – Fish Not determined.

12.2. Persistence and degradability

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



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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: Not determined.

12.5. Results of PBT and vPvB assessment

This mixture PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6. Other adverse effects

Not determined.
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

SECTION 13: DISPOSAL CONSIDERATIONS

General information: Waste is classified as non-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

IMDG Not dangerous goods.

IATA Not dangerous goods

DOT (US) Not dangerous goods.

SECTION 15: REGULATORY INFORMATION

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

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.

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.



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SARA 302 Components

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.

SARA 313 Components

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 311/312 Hazards

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 and 312.

Extremely hazardous Substances; Section 355

None of the components in the mixture are listed.

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

Toxic substances control Act; TSCA Current revision

None of the components in this mixture are listed.

California Prop. 65 Components

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

Right to Know Components

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

Pennsylvania Right To Know Components: 5-Bromo-5-nitro-1,3-dioxane CAS-No. 30007-47-7

New Jersey Right To Know Components: 5-Bromo-5-nitro-1,3-dioxane CAS-No. 30007-47-7

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out by Bio SB.

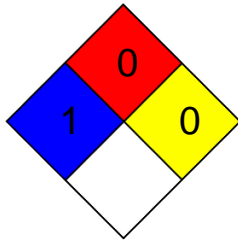
SECTION 16: OTHER INFORMATION

Abbreviations and Acronyms:

OSHA (USA)	Occupational Safety and Health Administration
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

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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
 UNII: Unique Ingredient Identifier (UNII) code
 vPvB: very Persistent and very Bioaccumulative
 Hazard Statements In Full for H code(s) and R Phrase(s) mentioned in section 3.
 H302 Harmful if swallowed
 H315 Causes skin irritation.

NFPA Scale: 0 - 4		
HMIS (U.S.A.) Scale: 0 - 4	HEALTH HAZARD	1
	FLAMMABILITY	0
	PHYSICAL HAZARD	0
	PERSONAL PROTECTION	B

General information: Only trained personnel should use this material.
 SDS No.: 0023 Revision A
 Date: 07/12/2019

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.

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