



ImmunoRetriever 20X with Citrate Material Safety Data Sheet

Section 1 – Product Information

Product Name ImmunoRetriever 20X with Citrate
Product Numbers:

BSB 0023	ImmunoRetriever 20X with Citrate, 50 ml (1 lt)
BSB 0020	ImmunoRetriever 20X with Citrate, 200 ml (4 lt)
BSB 0021	ImmunoRetriever 20X with Citrate, 500 ml (10 lt)
BSB 0022	ImmunoRetriever 20X with Citrate, 1000 ml (20 lt)
BSB 0022 3.5L	ImmunoRetriever 20X with Citrate, 3500 ml (70 lt)

Brand Bio SB
Company Bio SB, Inc.
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City, State, Zip, Country Santa Barbara, CA 93117, USA
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Section 2- Composition /Information on ingredients

NOTE: The product(s)/component(s) listed on this page are NOT CLASSIFIED AS HAZARDOUS at product concentrations, due to their physical and/or chemical nature and/or concentration in solution, in accordance with OSHA regulations and European Union Directives. This MSDS contains valuable information critical to the safe handling and proper use of the product/component, and should be retained and accessible to employees during all uses of this material. Composition disclosure is not required for products/components not classified as hazardous, as per 29CFR 1910.1200.

<u>Name / %</u>	<u>Formula</u>	<u>CAS #</u>	<u>Hazard Classification</u>
Citric Acid <1%	C ₆ H ₈ O ₇	77-92-9	R 36/37/38 S 26/S37/S39
Bromo-5-Nitro-1,3-Dioxane 1-<2%	C ₄ H ₆ BrNO ₄	30007-47-7	R22, R38, S36

Section 3- Hazards Identification

EMERGENCY OVERVIEW

Potential irritant liquid. Prolonged contact may cause redness and irritation of skin and eyes.

HMIS RATING

HEALTH: 0
FLAMMABILITY: 0
REACTIVITY: 0

NFPA RATING

HEALTH: 0
FLAMMABILITY: 0
REACTIVITY: 0

Section 4- First Aid Measures

ORAL EXPOSURE

Remove victim to well-ventilated area. Seek immediate medical attention. If face is blue or breathing is labored, lay victim on back, open and clear airway and give oxygen. If unconscious, lay victim on side, loosen tight clothing and monitor vital signs. If conscious, give water and have victim rinse mouth. If vomiting, have victim sitting up and leaning forward.

DERMAL EXPOSURE

In case of contact, immediately wash skin with soap and copious amounts of water. Remove contaminated clothing. Seek immediate medical attention.

EYE EXPOSURE

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician. If worn, have victim remove contacts.

Section 5- Fire Fighting Measures

FLASH POINT	N/A (non-Flammable)
AUTOIGNITION TEMP	N/A
FLAMMABILITY	N/A
EXTINGUISHING MEDIA	No restrictions. Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

FIREFIGHTING

Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Specific Hazard(s): Emits toxic fumes under fire conditions.

Section 6- Accidental Release Measures

PROCEDURE (S) OF PERSONAL PRECAUTION (S)

Exercise appropriate precautions to minimize direct contact with skin or eyes. Personal protective equipment and clothing is recommended during cleanup procedures.

METHODS FOR CLEANING UP

Avoid physical contact during removal. Absorb on earth, sand or vermiculite and place in a bag and hold for waste disposal. Wash spill site after material pick up is complete.

Section 7- Handling and Storage

HANDLING

User Exposure: Avoid contact with eyes, skin, and clothing. Wear gloves when handling this product.

STORAGE

Suitable: Keep tightly close. Store at room temperature in a cool, dry and well-ventilated location at room temperature. Keep out of reach of children.

Section 8- Exposure Controls / PPE

PERSONAL PROTECTIVE EQUIPMENT

Hand: Protective gloves.

GENERAL HYGIENE MEASURES

Wash thoroughly after handling.

Section 9- Physical / Chemical Properties

Appearance	Physical State: Liquid, Color: Green or Colorless Liquid Form: Liquid
Solubility in water	Soluble in water
Specific gravity	N/A*
Melting point	N/A*
Evaporation Rate	N/A*

*N/A = not available

Section 10- Stability and Reactivity

STABILITY

Stable: Stable when used under normal conditions and within the scope of the intended application

Conditions of Instability: Avoid high temperatures or direct sunlight.

Conditions to Avoid: High Temperature and moisture.

Materials to Avoid: Strong-oxidizing agents, strong acids and bases.

HAZARDOUS DECOMPOSITION PRODUCTS: None identified.

Section 11- Toxicological Information

ROUTE OF EXPOSURE

Skin Contact: May cause skin irritation.

Skin absorption: May be Harmful if absorbed through the skin.

Eye Contact: May cause eye irritation.

Inhalation: May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.

Ingestion: May be harmful if swallowed.

SIGNS AND SYMPTOMS OF EXPOSURE

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

TOXICITY DATA

Citric Acid

Draize test, rabbit, eye: 750 ug/24 hours Severe;
Draize test, rabbit, skin: 500 mg/24 hours Mild;
Oral LD₅₀, mouse, oral 5040 mg/kg
LD₅₀, rat, oral 3 g/kg

Bromo-5-Nitro-1,3-Dioxane

Oral: LD₅₀, rat, ipr. 31 mg/kg 24 hours
LD₅₀, rat, oral 455 mg/kg 24 hours
Skin: LD₅₀, mouse, skin 2500 µg/24 hours
LD₅₀, rat, skin 2500 µg/24 hours

Section 12- Ecological Information

Mobility: This product is water-soluble and may spread in water systems. This product is not particularly volatile.

Degradability: N/A

Accumulation: N/A

Ecotoxicity: N/A

Other Hazardous Effects: N/A

Section 13- Disposal Considerations

APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION

Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

Section 14- Transport Information

DOT

Proper Shipping Name: None

Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.

IATA

NOT RESTRICTED. Non-Hazardous for Air Transport:

Section 15- Regulatory Information

EU ADDITIONAL CLASSIFICATION

Safety Statements: Avoid contact with skin and eyes.

US CLASSIFICATION AND LABEL TEXT

US Statements: Caution: Avoid contact.

UNITED STATES REGULATORY INFORMATION

SARA LISTED: No

TSCA INVENTORY ITEM: Yes

OSHA STATUS

At product concentrations, the chemical components listed on this MSDS are classified as irritant.

CANADA REGULATORY INFORMATION

WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

Contains Chemical identification not required on label.

HAZARD SYMBOL: **NOT REQUIRED**

R22	Harmful if swallowed
R 36/37/38	Irritating to eyes, respiratory system and skin
S 26	In case of contact with eyes rinse immediately with plenty of water and seek medical advice.
S36	Wear suitable protective clothing
S 37/39	Wear suitable gloves and eye/face protection.

Section 16- Other Information

DISCLAIMER

For Laboratory use only. Not for drug, household or other uses.

WARRANTY

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Bio SB, Inc., shall not be held liable for any damage resulting from handling or from contact with the above product.

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