



Material Safety Data Sheet

According to 91/155 EC

Melatonin RIA

REF **IB88111**

REF **IB88139**

Relevant Material Safety Data Sheets:

MSDS BA 010

MSDS BA 020

MSDS BA 028

MSDS BA 030

MSDS BA 101

MSDS BA 113

MSDS BA 316



MSDS BA 010

1. Identification of Substance

Product details:

Trade name: Antiserum ^{AS}

Supplier Information: **Immuno-Biological Laboratories, Inc.**
8201 Central Ave NE, Suite P
Minneapolis, Minnesota 55432
Tel: 763-780-2955
Fax: 763-780-2988
www.ibl-america.com

Emergency call number: In the event of a medical emergency, please dial 911.

2. Composition/Information on Ingredients

Chemical characterization of preparation

Description: Aqueous solution

Hazardous ingredients: Not applicable

3. Potential Hazards

Hazard specification: Not applicable.

Special hazard warnings for humans and the environment: The product is not subject to specific labelling under current EU regulations of the "Allgemeine Einstufungsrichtlinie für Zubereitungen der EG".

4. First-aid Measures

General information: No special measures required.

Inhalation: Fresh air supply. In case of discomfort, seek medical attention.

Skin contact: Immediately wash skin using water and soap, then rinse thoroughly with water.

Eye contact: Holding the eyelid open, rinse eye for several minutes using large quantities of water.

Swallowing: Drink large quantities of water and seek medical attention in case of discomfort.

5. Fire-fighting Measures

Suitable extinguishing media: CO₂-powder or jet of water.

Special protective equipment required for fire-fighters: No special equipment required.

6. Accidental Release Measures

Personal protection: Wear protective clothing. Remove unprotected persons from danger zone.

Environmental protection: Do not dispose down the drains or into waters.

Methods of cleaning/absorbing: Soak up mechanically with suitable liquid-binding material (sand, diatomite, universal binder, saw dust).

7. Handling and Storage

Handling

Information on secure handling: No special measures required.

Information on fire and explosive protection: No special fire- and explosion protection measures required.

Storage

Requirements for storing rooms and containers: There are no special requirements.

Information on storage in one common storage facility: Not applicable.

Further information on storage conditions: Not applicable.

Storage class: -

8. Exposure Control/Personal Protection

Additional information for system design: No further information, also see point 7.

Components with special workplace-related control parameters: The product does not contain any relevant quantities of substances with workplace-related control parameters.

Personal protective equipment

General protection and hygiene measures: Keep away from food, beverages and animal feed. Remove contaminated clothes at once. Always wash hands before having a break and at the end of a working day.

Inhalation protection: Not applicable.

Hand protection: Suitable protective gloves (In case of accidental release only)

Eye protection: Not required

9. Physical and Chemical Properties

Form:	liquid
Colour:	according to type of antiserum dyed blue, yellow or green
Odour:	odourless.
pH-value:	approx. 7.5
Boiling point:	approx. 100°C
Flashpoint:	not applicable
Autoignition temperature:	product is not self-igniting
Explosion properties:	not explosive.
Vapour pressure:	undetermined.
Density:	approx. 1g / cm ³ .
Solubility:	Water: 100%.
Solvent percentage:	< 0,0%

10. Stability and Reactivity

Conditions to avoid: No decomposition if used according to specifications.

Materials to avoid: No dangerous reaction known.

Hazardous decomposition products: No dangerous decomposition products known.

11. Toxicological Information

Skin contact: No skin irritation known.

Eye contact: No irritation known.

Further information: Product is not subject to specific labelling.



12. Ecological Information

General information: Not hazardous to water.
Mobility and bioaccumulation: No bioaccumulation known.
Ecotoxicity: No ecotoxicity known.

13. Disposal Considerations

Waste from residues: Disposal must be made according to official regulations
Contaminated packaging: Disposal must be made according to official regulations.
For references and partners, please refer to www.retrologistik.de

14. Transport information

International regulations:
Transport by road: RID/ ADR/ DoT49 CFR
Class: -
By sea IMDG/GGVSee
Class: -
By air: ICAO-TI, IATA-DGR
Class: -
Transport / further information: Due to the small quantities this product is not hazardous according to recent regulations on hazardous material.

15. Regulatory Information

Labelling according to EU-Directives: The product is not subject to specific labelling under EU directives. Observe the general safety regulations when handling chemicals.
Classification according to Classification as per German Health and Safety at Work Regulations (BetrSichV):-
Water pollution class: Not hazardous to water.

16. Other Information

The information provided in this Material Safety Data Sheet (MSDS) is believed to be accurate and represents the best information currently available to us. This safety data sheet describes our products with respect to safety requirements, however, it does not provide any guarantee on product properties and does not constitute any legal relationship.

Relevant R-phrases: Not applicable.



MSDS BA 020

1. Identification of Substance

Product details:

Trade name: Iodine ¹²⁵I

Supplier Information: **Immuno-Biological Laboratories, Inc.**
8201 Central Ave NE, Suite P
Minneapolis, Minnesota 55432
Tel: 763-780-2955
Fax: 763-780-2988
www.ibl-america.com

Emergency call number: In the event of a medical emergency, please dial 911.

2. Composition / Information on Ingredients

Chemical Characterization of preparation

Description: Aqueous solution

Hazardous ingredients: I-125, radioactive substance (100 – 200 kBq/bottle) with 60 days half-life

3. Potential Hazards

Hazard specification: Radioactive material

Special hazard warnings for humans and the environment: For information with respect to hazards for human beings and the environment please refer to the Atomic Energy Act or Radiological Protection Ordinance. The product must be labelled as radioactive material.

4. First-aid measures

General information: In case of contamination immediately contact radiation protection officer. First-aid measures should be administered before radiation protection measures.

Inhalation: Fresh air supply. In case of discomfort, seek medical attention.

Skin contact: Immediately wash skin using water and soap, then rinse thoroughly with water. Use decontamination agent if contamination could not be removed.

Eye contact: Holding the eyelid open, rinse the eye for several minutes using large quantities of water.

Swallowing: Drink large quantities of water and seek medical attention in case of discomfort.

5. Fire-fighting measures

Suitable extinguishing media: CO₂-powder or jet of water.

Special protective equipment required for fire-fighters: No special equipment required.

6. Accidental Release Measures

Personal protection: Wear protective clothing. Remove unprotected persons from danger zone. Cordon off danger zone and mark up if required.

Environmental protection: Do not dispose down the drains or into waters.

Methods of cleaning/absorbing: Soak up mechanically with suitable liquid-binding material (sand, diatomite, activated charcoal, universal binder, saw dust).



7. Handling and Storage

Handling

Information on secure handling: Observe regulations on handling of radioactive substances.

Information on fire and explosive protection: No special fire- and explosion protection measures are required.

Storage

Requirements for storing rooms and containers: The storage room must be specially marked and be kept locked.

Information on storage in one common storage facility: Not applicable.

Further information on storage conditions: Radioactive substances may be stored in specially marked areas only.

Storage class: -

8. Exposure Control/Personal Protection

Additional information for system design: Separate, lockable space required, also see point 7.

Components with special workplace-related control parameters: Limit values for I-125 must be adhered to.

Personal protective equipment

General protection and hygiene measures: Consumption and storage of food and beverages is prohibited in rooms where I-125 is handled with. Remove contaminated clothing immediately. Always wash hands before having a break and at the end of a working day.

Inhalation protection: Not applicable.

Hand protection: Suitable protective gloves

Eye protection: Not applicable

9. Physical and chemical properties

Form:	liquid
Colour:	red
Odour:	odourless
pH-value:	approx. 7.5
Boiling point:	approx. 100°C
Flashpoint:	not applicable
Autoignition temperature:	not self-igniting
Explosion properties:	not explosive.
Vapour pressure:	undetermined.
Density:	approx. 1g / cm ³ .
Solubility:	Water: 100%.
Solvent percentage:	< 0.0%

10. Stability and Reactivity

Conditions to avoid: No decomposition if used according to specifications.

Materials to avoid: No dangerous reaction known.

Hazardous decomposition products: No decomposition products known.

11. Toxicological Information

Skin contact: Radioactive contamination.

Eye contact: Radioactive contamination.

Further information: Product is radioactive



12. Ecological information

General information: Product is radioactive.

Environmental protection measures: Do not dispose down the drains, into waters or soil.

13. Disposal Considerations

Waste from residues: The wastes must be marked "radioactive" and disposal must be made according to official regulations

14. Transport information

International regulations:

Transport by road: RID/ ADR/ DoT49 CFR

Class: UN 2910 radioactive substance, excepted package, limited quantity

By sea IMDG/GGVSee

Class: UN 2910 radioactive substance, excepted package, limited quantity



By air: ICAO-TI, IATA-DGR

Class: UN 2910 radioactive substance, excepted package, limited quantity

Transport / further information: Due to the small quantities this product is not hazardous according to recent regulations on hazardous material.

15. Regulatory Information

Labelling according to EU-Directives: The product is subject to labelling under EU directives.

Radioactive 


16. Other Information

The information provided in this Material Safety Data Sheet (MSDS) is believed to be accurate and represents the best information currently available to us. This safety data sheet describes our products with respect to safety requirements, however, it does not provide any guarantee on product properties and does not constitute any legal relationship.

MSDS BA 028

1. Identification of Substance

Product details:

Trade name: Equalizing Reagent
EQUA-REAG

Catalogue numbers: BA R-0028, BA E-1028, BA E-2428

Supplier Information: Immuno-Biological Laboratories, Inc.
8201 Central Ave NE, Suite P
Minneapolis, Minnesota 55432
Tel: 763-780-2955
Fax: 763-780-2988
www.ibl-america.com

Emergency call number: In the event of a medical emergency, please dial 911.

2. Composition/Information on Ingredients

Chemical Characterization of preparation

Description: Aqueous solution

Hazardous ingredients: Not applicable

3. Potential Hazards

Hazard specification: Not applicable.

Special hazard warnings for humans and the environment: The product is not subject to specific labelling under current EU regulations of the "Allgemeine Einstufungsrichtlinie für Zubereitungen der EG".

4. First-aid Measures

General information: No special measures required.

Inhalation: Fresh air supply. In case of discomfort, seek medical attention.

Skin contact: Immediately wash skin using water and soap, then rinse thoroughly with water.

Eye contact: Holding the eyelid open, rinse the eye for several minutes using large quantities of water.

Swallowing: Drink large quantities of water and seek medical attention in case of discomfort.

5. Fire-fighting measures

Suitable extinguishing media: CO₂-powder or jet of water.

Special protective equipment required for fire-fighters: No special equipment required.

6. Accidental Release Measures

Personal protection: Wear protective clothing. Remove unprotected persons from danger zone.

Environmental protection: Do not dispose down the drains or into ground water.

Methods of cleaning/absorbing: Soak up mechanically with suitable liquid-binding material (sand, diatomite, acid binder, universal binder, saw dust).



7. Handling and Storage

Handling

Information on secure handling: No special measures required.

Information on fire and explosive protection: No special fire- and explosion protection measures are required.

Storage

Requirements for storing rooms and containers: There are no special requirements.

Information on storage in one common storage facility: Not applicable.

Further information on storage conditions: Not applicable.

Storage class: -

8. Exposure Control/Personal Protection

Additional information for system design: No further information, also see point 7.

Components with special workplace-related control parameters: The product does not contain any relevant quantities of substances with workplace-related control parameters.

Personal protective equipment

General protection and hygiene measures: Keep away from food, beverages and animal feed. Remove contaminated clothes at once. Always wash hands before having a break and at the end of a working day. Product might be infectious.

Inhalation protection: Not applicable.

Hand protection: Suitable protective gloves (In case of accidental release only)

Eye protection: Not required

9. Physical and chemical properties

Form: lyophilized or liquid according to type of antiserum

Colour: amber

Odour: odourless

pH-value: 7.2 – 7.4

Boiling point: approx. 100°C

Flashpoint: not applicable

Autoignition temperature: not self-igniting

Explosion properties: not explosive.

Vapour pressure: undetermined.

Density: approx. 1g / cm³.

Solubility: Water: 100%.

Solvent percentage: < 0.0%

10. Stability and Reactivity

Conditions to avoid: No decomposition if used according to specifications.

Materials to avoid: None, as no dangerous reactions are known.

Hazardous decomposition products: No decomposition products known.

11. Toxicological Information

Skin contact: No irritation known.

Eye contact: No irritation known.

Further information: Product is not subject to labelling



12. Ecological information

General information: Not hazardous to water.
Mobility and bioaccumulation: No bioaccumulation known.
Ecotoxicity: No ecotoxicity known.

13. Disposal Considerations

Waste from residues: Arising residues are normally wastes which have to be disposed of according to official regulations

Contaminated packaging: Disposal must be made according to official regulations.
For references and partners, please refer to www.retrologistik.de

14. Transport information

International regulations:

Transport by road: RID/ ADR/ DoT49 CFR

Class: -

By sea IMDG/GGVSee

Class: -

By air: ICAO-TI, IATA-DGR

Class: -

Transport / further information: This product is not hazardous according to recent regulations on hazardous material.

15. Regulatory Information

Labelling according to EU-Directives: The product is not subject to identification regulations under EU directives. Observe the general safety regulations when handling chemicals.

Classification according to Classification as per German Health and Safety at Work Regulations (BetrSichV):- Not hazardous to water.

16. Other Information

The information provided in this Material Safety Data Sheet (MSDS) is believed to be accurate and represents the best information currently available to us. This safety data sheet describes our products with respect to safety requirements, however, it does not provide any guarantee on product properties and does not constitute any legal relationship.

Relevant R-phrases: Not applicable

MSDS BA 030

1. Identification of Substance

Product details:

Trade name: Precipitation Reagent PREC-REAG

Supplier Information: Immuno-Biological Laboratories, Inc.
8201 Central Ave NE, Suite P
Minneapolis, Minnesota 55432
Tel: 763-780-2955
Fax: 763-780-2988
www.ibl-america.com

Emergency call number: In the event of a medical emergency, please dial 911.

2. Composition/Information on Ingredients

Chemical Characterization of preparation

Description: Aqueous solution

Hazardous ingredients: Not applicable

3. Potential Hazards

Hazard specification: Not applicable.

Special hazard warnings for humans and the environment: The product is not subject to specific labelling under current EU regulations of the "Allgemeine Einstufungsrichtlinie für Zubereitungen der EG".

4. First-aid Measures

General information: No special measures required.

Inhalation: Fresh air supply. In case of discomfort, seek medical attention.

Skin contact: Immediately wash skin using water and soap, then rinse thoroughly with water.

Eye contact: Holding the eyelid open, rinse eye for several minutes using large quantities of water.

Swallowing: Drink large quantities of water and seek medical attention in case of discomfort.

5. Fire-fighting measures

Suitable extinguishing media: CO₂-powder or jet of water.

Special protective equipment required for fire-fighters: No special equipment required.

6. Accidental Release Measures

Personal protection: Wear protective clothing. Remove unprotected persons from danger zone.

Environmental protection: Do not dispose down the drains or into waters.

Methods of cleaning/absorbing: Soak up mechanically with suitable liquid-binding material (sand, diatomite, acid binder, universal binder, saw dust).

7. Handling and Storage

Handling

Information on secure handling: No special measures required.

Information on fire and explosive protection: No special fire- and explosion protection measures are required.

Storage

Requirements for storing rooms and containers: There are no special requirements.

Information on storage in one common storage facility: Not applicable.

Further information on storage conditions: Not applicable.

Storage class: -

8. Exposure Control/Personal Protection

Additional information for system design: No further information, also see point 7.

Components with special workplace-related control parameters: The product does not contain any relevant quantities of substances with workplace-related control parameters.

Personal protective equipment

General protection and hygiene measures: Keep away from food, beverages and animal feed. Remove contaminated clothes at once. Always wash hands before having a break and at the end of a working day.

Inhalation protection: Not applicable.

Hand protection: Suitable protective gloves (In case of accidental release only)

Eye protection: Not applicable

9. Physical and chemical properties

Form:	liquid
Colour:	colourless, yellowish
Odour:	odourless
pH-value:	approx. 7.5
Boiling point:	approx. 100°C
Flashpoint:	not applicable
Autoignition temperature:	not self-igniting
Explosion properties:	not explosive.
Vapour pressure:	undetermined.
Density:	approx. 1g / cm ³ .
Solubility:	Water: 100%.
Solvent percentage:	< 0.0%

10. Stability and Reactivity

Conditions to avoid: No decomposition if used according to specifications.

Materials to avoid: None, as no dangerous reactions are known.

Hazardous decomposition products: No decomposition products known.

11. Toxicological Information

Skin contact: No irritation known.

Eye contact: No irritation known.

Further information: Product is not subject to labelling

12. Ecological information

General information: Not hazardous to water.
Mobility and bioaccumulation: No bioaccumulation known.
Ecotoxicity: No ecotoxicity known.

13. Disposal Considerations

Waste from residues: Residues have to be disposed of according to official regulations

Contaminated packaging: Disposal must be made according to official regulations.
For references and partners, please refer to www.retrologistik.de

14. Transport information

International regulations:

Transport by road: RID/ ADR/ DoT49 CFR

Class: -

By sea IMDG/GGVSee

Class: -

By air: ICAO-TI, IATA-DGR

Class: -

Transport / further information: Due to the small quantities this product is not hazardous according to recent regulations on hazardous material.

15. Regulatory Information

Labelling according to EU-Directives: The product is not subject to identification regulations under EU directives. Observe the general safety regulations when handling chemicals.

Classification according to Classification as per German Health and Safety at Work Regulations (BetrSichV):- Not hazardous to water.

16. Other Information

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Relevant R-phrases: Not applicable

MSDS BA 101

1. Identification of Substance

Product details:

Trade name: Standard / Control

STANDARD

CONTROL

Catalogue numbers: BA R-8901 - BA R-8906, BA R-8951 - BA R-8952, BA E-1901 - BA E-1906, BA E-1951 - BA E-1952, BA R-3301 - BA R-3307, BA R-3351 - BA R-3352

Supplier Information: **Immuno-Biological Laboratories, Inc.**

8201 Central Ave NE, Suite P
Minneapolis, Minnesota 55432
Tel: 763-780-2955
Fax: 763-780-2988
www.ibl-america.com

Emergency call number: In the event of a medical emergency, please dial 911.

2. Composition/Information on Ingredients

Chemical characterization of preparation

Description: Aqueous solution

Hazardous ingredients: Not applicable

3. Potential Hazards

Hazard specification: Not applicable.

Special hazard warnings for humans and the environment: The product is not subject to specific labelling under current EU regulations of the "Allgemeine Einstufungsrichtlinie für Zubereitungen der EG".

4. First-aid Measures

General information: No special measures required.

Inhalation: Fresh air supply. In case of discomfort, seek medical attention.

Skin contact: Immediately wash skin using water and soap, then rinse thoroughly with water.

Eye contact: Holding the eyelid open, rinse eye for several minutes using large quantities of water.

Swallowing: Drink large quantities of water and seek medical attention in case of discomfort.

5. Fire-fighting Measures

Suitable extinguishing media: CO₂-powder or jet of water.

Special protective equipment required for fire-fighters: No special equipment required.

6. Accidental Release Measures

Personal protection: Wear protective clothing. Remove unprotected persons from danger zone.

Environmental protection: Do not dispose down the drains or into ground water.

Methods of cleaning/absorbing: Soak up mechanically with suitable liquid-binding material (sand, diatomite, acid binder, universal binder, saw dust).



7. Handling and Storage

Handling

Information on secure handling: No special measures required.

Information on fire and explosive protection: No special fire- and explosion protection measures required.

Storage

Requirements for storing rooms and containers: There are no special requirements.

Information on storage in one common storage facility: Not applicable.

Further information on storage conditions: Not applicable.

Storage class: -

8. Exposure Control/Personal Protection

Additional information for system design: No further information, also see point 7.

Components with special workplace-related control parameters: The product does not contain any relevant quantities of substances with workplace-related control parameters.

Personal protective equipment

General protection and hygiene measures: Keep away from food, beverages and animal feed. Remove contaminated clothing immediately. Always wash hands before having a break and at the end of a working day.

Inhalation protection: Not applicable.

Hand protection: Suitable protective gloves (In case of accidental release only)

Eye protection: Safety glasses

9. Physical and Chemical Properties

Form:	liquid
Colour:	colourless-yellowish
Odour:	odourless.
pH-value:	approx. 7.5
Boiling point:	approx. 100°C
Flashpoint:	not applicable
Autoignition temperature:	product is not self-igniting
Explosion properties:	not explosive.
Vapour pressure:	undetermined.
Density:	approx. 1g / cm ³ .
Solubility:	Water: 100%.
Solvent percentage:	< 0,0%

10. Stability and Reactivity

Conditions to avoid: No decomposition if used according to specifications.

Materials to avoid: No dangerous reaction known.

Hazardous decomposition products: No dangerous decomposition products known.

11. Toxicological Information

Skin contact: No skin irritation known.

Eye contact: Irritation.

Further information: Product is not subject to labelling.



12. Ecological Information

General information: Not hazardous to water.
Mobility and bioaccumulation: No bioaccumulation known.
Ecotoxicity: No ecotoxicity known.

13. Disposal Considerations

Waste from residues: Disposal according to official regulations
Contaminated packaging: Disposal must be made according to official regulations.
For references and partners, please refer to www.retrologistik.de

14. Transport information

International regulations:
Transport by road: RID/ ADR/ DoT49 CFR
Class: -
By sea IMDG/GGVSee
Class: -
By air: ICAO-TI, IATA-DGR
Class: -
Transport / further information: Due to the small quantities this product is not hazardous according to recent regulations on hazardous material.

15. Regulatory Information

Labelling according to EU-Directives: The product is not subject to specific labelling under EU directives. Observe the general safety regulations when handling chemicals.
Classification according to Classification as per German Health and Safety at Work Regulations (BetrSichV):-
Water pollution class: Not hazardous to water.

16. Other Information

The information provided in this Material Safety Data Sheet (MSDS) is believed to be accurate and represents the best information currently available to us. This safety data sheet describes our products with respect to safety requirements, however, it does not provide any guarantee on product properties and does not constitute any legal relationship.

Relevant R-phrases: Not applicable.



MSDS BA 113

1. Identification of Substance

Product details:

Trade name: Assay Buffer

ASSAY-BUFF

Supplier Information: Immuno-Biological Laboratories, Inc.

8201 Central Ave NE, Suite P
Minneapolis, Minnesota 55432
Tel: 763-780-2955
Fax: 763-780-2988
www.ibl-america.com

Emergency call number: In the event of a medical emergency, please dial 911.

2. Composition/Information on Ingredients

Chemical Characterization of preparation

Description: Aqueous solution

Hazardous ingredients: Not applicable

3. Potential Hazards

Hazard specification: Not applicable.

Special hazard warnings for humans and the environment: The product is not subject to specific labelling under current EU regulations of the "Allgemeine Einstufungsrichtlinie für Zubereitungen der EG".

4. First-aid Measures

General information: No special measures required.

Inhalation: Fresh air supply. In case of discomfort, seek medical attention.

Skin contact: Immediately wash skin using water and soap, then rinse thoroughly with water.

Eye contact: Holding the eyelid open, rinse eye for several minutes using large quantities of water.

Swallowing: Drink large quantities of water and seek medical attention in case of discomfort.

5. Fire-fighting measures

Suitable extinguishing media: CO₂-powder or jet of water.

Special protective equipment required for fire-fighters: No special equipment required.

6. Accidental Release Measures

Personal protection: Wear protective clothing. Remove unprotected persons from danger zone.

Environmental protection: Do not dispose down the drains or into ground water.

Methods of cleaning/absorbing: Soak up mechanically with suitable liquid-binding material (sand, diatomite, acid binder, universal binder, saw dust).



7. Handling and Storage

Handling

Information on secure handling: No special measures required.

Information on fire and explosive protection: No special fire- and explosion protection measures are required.

Storage

Requirements for storing rooms and containers: There are no special requirements.

Information on storage in one common storage facility: Not applicable.

Further information on storage conditions: Not applicable.

Storage class: -

8. Exposure Control/Personal Protection

Additional information for system design: No further information, also see point 7.

Components with special workplace-related control parameters: The product does not contain any relevant quantities of substances with workplace-related control parameters.

Personal protective equipment

General protection and hygiene measures: Keep away from food, beverages and animal feed. Remove contaminated clothing immediately. Always wash hands before having a break and at the end of a working day.

Inhalation protection: Not applicable.

Hand protection: Suitable protective gloves

Eye protection: Not required.

9. Physical and chemical properties

Form:	liquid
Colour:	clear
Odour:	odourless
pH-value:	approx. 7 - 9
Boiling point:	approx. 100°C
Flashpoint:	not applicable
Autoignition temperature:	not self-igniting
Explosion properties:	not explosive.
Vapour pressure:	undetermined.
Density:	approx. 1g / cm ³ .
Solubility:	Water: 100%.
Solvent percentage:	< 0.0%

10. Stability and Reactivity

Conditions to avoid: No decomposition if used according to specifications.

Materials to avoid: No dangerous reaction known.

Hazardous decomposition products: No decomposition products known.

11. Toxicological Information

Skin contact: No irritation known.

Eye contact: No irritation known.

Further information: Product is not subject to labelling.



12. Ecological information

General information: Not hazardous to water.
Mobility and bioaccumulation: No bioaccumulation known.
Ecotoxicity: No ecotoxicity known.

13. Disposal Considerations

Waste from residues: Disposal must be made according to official regulations
Contaminated packaging: Disposal must be made according to official regulations.
For references and partners, please refer to www.retrologistik.de

14. Transport information

International regulations:
Transport by road: RID/ ADR/ DoT49 CFR
Class: -
By sea IMDG/GGVSee
Class: -
By air: ICAO-TI, IATA-DGR
Class: -
Transport / further information: Due to the small quantities this product is not hazardous according to recent regulations on hazardous material.

15. Regulatory Information

Labelling according to EU-Directives: The product is not subject to labelling under EU directives.
Observe the general safety regulations when handling chemicals.
Classification according to Classification as per German Health and Safety at Work Regulations (BetrSichV):-
Water pollution class: Not hazardous to water.

16. Other Information

The information provided in this Material Safety Data Sheet (MSDS) is believed to be accurate and represents the best information currently available to us. This safety data sheet describes our products with respect to safety requirements, however, it does not provide any guarantee on product properties and does not constitute any legal relationship.

Relevant R-phrases: None

MSDS BA 316

1. Identification of Substance

Product details:

Trade name: Enzyme Buffer **ENZYME-BUFF**

Catalogue number: BA R-3316

Supplier Information: **Immuno-Biological Laboratories, Inc.**
8201 Central Ave NE, Suite P
Minneapolis, Minnesota 55432
Tel: 763-780-2955
Fax: 763-780-2988
www.ibl-america.com

Emergency call number: In the event of a medical emergency, please dial 911.

2. Composition/Information on Ingredients

Chemical Characterization of preparation

Description: Aqueous solution

Hazardous ingredients: Hydrochloric acid (<2%), C, R 36/38

3. Potential Hazards

Hazard specification: Not applicable.

Special hazard warnings for humans and the environment: The product is not subject to specific labelling under current EU regulations of the "Allgemeine Einstufungsrichtlinie für Zubereitungen der EG".

4. First-aid Measures

General information: No special measures required.

Inhalation: Fresh air supply. In case of discomfort, seek medical attention.

Skin contact: Immediately wash skin using water and soap, then rinse thoroughly with water.

Eye contact: Holding the eyelid open, rinse eye for several minutes using large quantities of water.

Swallowing: Drink large quantities of water and seek medical attention in case of discomfort.

5. Fire-fighting measures

Suitable extinguishing media: CO₂-powder or jet of water.

Special protective equipment required for fire-fighters: No special equipment required.

6. Accidental Release Measures

Personal protection: Wear protective clothing. Remove unprotected persons from danger zone.

Environmental protection: Do not dispose down the drains or into ground water.

Methods of cleaning/absorbing: Soak up mechanically with suitable liquid-binding material (sand, diatomite, acid binder, universal binder, saw dust).



7. Handling and Storage

Handling

Information on secure handling: No special measures required.

Information on fire and explosive protection: No special fire- and explosion protection measures are required.

Storage

Requirements for storing rooms and containers: There are no special requirements.

Information on storage in one common storage facility: Not applicable.

Further information on storage conditions: Not applicable.

Storage class: 8 B (VCI).

8. Exposure Control/Personal Protection

Additional information for system design: No further information, also see point 7.

Components with special workplace-related control parameters: The product does not contain any relevant quantities of substances with workplace-related control parameters.

Personal protective equipment

General protection and hygiene measures: Keep away from food, beverages and animal feed. Remove contaminated clothing immediately. Always wash hands before having a break and at the end of a working day.

Inhalation protection: Not applicable.

Hand protection: Suitable protective gloves (In case of accidental release only)

Eye protection: Safety glasses

9. Physical and chemical properties

Form:	liquid
Colour:	colourless
Odour:	odourless
pH-value:	approx. 1.
Boiling point:	approx. 100°C
Flashpoint:	not applicable
Autoignition temperature:	not self-igniting
Explosion properties:	not explosive.
Vapour pressure:	undetermined.
Density:	approx. 1g / cm ³ .
Solubility:	Water: 100%.
Solvent percentage:	< 0.0%

10. Stability and Reactivity

Conditions to avoid: No decomposition if used according to specifications.

Materials to avoid: No dangerous reaction known.

Hazardous decomposition products: No decomposition products known.

11. Toxicological Information

Skin contact: No irritation known.

Eye contact: Irritation.

Further information: Product is not subject to labelling.



12. Ecological information

General information: Not hazardous to water.
Mobility and bioaccumulation: No bioaccumulation known.
Ecotoxicity: No ecotoxicity known.

13. Disposal Considerations

Waste from residues: Disposal must be made according to official regulations
Contaminated packaging: Disposal must be made according to official regulations.
For references and partners, please refer to www.retrologistik.de

14. Transport information

International regulations:
Transport by road: RID/ ADR/ DoT49 CFR
Class: -
By sea IMDG/GGVSee
Class: -
By air: ICAO-TI, IATA-DGR
Class: -
Transport / further information: Due to the small quantities this product is not hazardous according to recent regulations on hazardous material.

15. Regulatory Information

Labelling according to EU-Directives: The product is not subject to identification regulations under EU directives. Observe the general safety regulations when handling chemicals.
Classification according to Classification as per German Health and Safety at Work Regulations (BetrSichV):-
Water pollution class: Not hazardous to water.

16. Other Information

The information provided in this Material Safety Data Sheet (MSDS) is believed to be accurate and represents the best information currently available to us. This safety data sheet describes our products with respect to safety requirements, however, it does not provide any guarantee on product properties and does not constitute any legal relationship.

Relevant R-phrases: 36/38 (Products are not subject to labelling as this is diluted hydrochloric acid (1.5%))