

SECTION 1: IDENTIFICATION

1.1 Product identifier

Product Name

Pretreat B

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

Identified uses

For research use only. Not for diagnostic use.

1.3 Details of the supplier of the data sheet

Company

Molecular Instruments, Inc.
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Telephone

SECTION 2. HAZARDS IDENTIFICATION

This safety data sheet complies with the requirements of Regulation EC 1907/2006.

2.1 Classification of the substance or mixture

Not a hazardous substance or mixture.

2.2 Label elements including precautionary statements

Not a hazardous substance or mixture.

2.3 Other hazards

None.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Chemical Characterization

Mixtures.

3.2 Dangerous Components

Chemical Name	CAS No	Weight %
Tetrasodium ethylene diamine tetraacetate	64-02-8	< 0.1
2-butoxyethanol	111-76-2	< 0.1

*Actual concentrations are withheld as a trade secret.

SECTION 4. FIRST AID MEASURES

4.1 Description of first aid measures

General information

Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice.

Inhalation

Allow victim to breath fresh air. Allow the victim to rest. Get medical attention if symptoms occur.

Ingestion	Rinse mouth. Do not induce vomiting without medical advice. Drink plenty of water. Consult a physician.
Skin Contact	Rinse immediately with plenty of water. Get medical attention if symptoms occur.
Eye Contact	Flush immediately with plenty of water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Remove contact lenses if present.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in Section 2.2 and/or in Section 11.

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

Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

5.1 Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Do not use high volume water jet.

5.2 Special hazards

Do not allow run-off from fire fighting to enter drains or water courses.

5.3 Advice for fire fighters

Wear self-contained breathing apparatus and protective suit.

5.4 Further information

Standard procedure for chemical fires. 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

Always use personal protection equipment. Avoid dust formation. Avoid breathing dust.

6.2 Environmental Precautions

No special environmental protection measures are necessary.

6.3 Methods and material for containment and clean up

Absorb with liquid-binding material (e.g., sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

6.4 Reference to other sections

Wear personal protective equipment as described in Section 8 of the safety data sheet.

SECTION 7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Provide good ventilation in the process area. Always wear recommended personal protective equipment. Avoid contact with skin, eyes, and clothing.

7.2 Conditions for safe storage, including any incompatibles

Store at 2-8°C under sterile conditions. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Keep away from food and drink.

7.3 Specific end use(s)

For research use only.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Workplace Exposure Limits (WEL)

Chemical Name	Cas No	Value	Control Parameters	Basis
2-butoxyethanol	111-76-2	TWA	20 ppm	ACGIH
		TWA	50 ppm 240 mg/m ³	OSHA PEL
		TWA	5 ppm 24 mg/m ³	NIOSH
		IDLH	700 ppm	NIOSH

8.2 Exposure controls

Personal Protective Equipment

Wear protective gloves/protective clothing and eye/face protection. Only wear fitting, comfortable, and clean protective clothing. With correct and proper use, and under normal conditions, breathing protection is not required.

Respiratory Protection

Hand Protection

Tested protective gloves are to be worn: DIN-/EN-Norms: EN ISO 374.

Eye Protection

Tightly sealed safety glasses.

Skin and Body Protection

Wear suitable protective clothing.

Environmental exposure controls

Refer to Section 6. No further action is necessary.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance: Liquid.

9.2 Other information

No data available.

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity

No data available.

10.2 Stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

Exposure to light and heat.

10.5 Incompatible materials

No data available.

10.6 Hazardous decomposition products

No data available.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Toxicological information

Acute Toxicity

Chemical Name	LD50 (oral, rat/mouse)	LD50 (dermal, rat/rabbit)	LD50 (inhalation, rat/mouse)
Tetrasodium ethylene diamine tetraacetate	1658 mg/kg	-	-
2-butoxyethanol	470 mg/kg	435 mg/kg	450 ppm (4 h) 486 ppm (4 h)

Principle Routes of exposure

Potential Health Effects

Inhalation

May be harmful if inhaled.

Ingestion

May be harmful if swallowed.

Skin contact

Frequently or prolonged contact with skin may cause dermal irritation.

Eye contact

May cause eye irritation in susceptible persons.

Carcinogenetic effects

This product contains one or more substances which are classified as carcinogenic.

Mutagenic effects

No data available.

Reproductive toxicity

No data available.

Sensitization

No data available.

Target organ effects

No data available.

Other adverse effect

No data available.

SECTION 12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity

Chemical Name	Freshwater Algae Data	Water Flea Data	Freshwater Fish Species Data
Tetrasodium ethylene diamine tetraacetate	-	-	LC50 = 41 mg/L (96 h) (L. macrochirus) LC50 = 59.8 mg/L (96 h) (P. promelas)
2-butoxyethanol	-	-	LC50 = 1490 mg/L (96 h) (L. macrochirus) LC50 = 2950 mg/L (96 h) (L. macrochirus)

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulation potential

No data available.

12.4 Mobility in soil

No data available.

12.5 Other adverse effects

No data available.

SECTION 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Disposal of this product shall comply with all the requirements of all applicable local, regional, national/federal regulations.

SECTION 14. TRANSPORT INFORMATION

IATA/ADR/DOT-US/IMDG

Not dangerous goods. Not regulated by transport regulations.

14.1 UN number	Not applicable
14.2 UN proper shipping name	Not applicable
14.3 Transport hazard class(es)	Not applicable
14.4 Packaging group	Not applicable
14.5 Environmental hazards	Not applicable

SECTION 15. REGULATORY INFORMATION

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

TSCA

Chemical Name	CAS No	US TSCA Inventory Listing	US TSCA inactive/active designation
Tetrasodium ethylene diamine tetraacetate	64-02-8	X	Active
2-butoxyethanol	111-76-2	X	Active

US Federal Regulations

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312

No SARA Hazards.

SARA 313

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.

Clean Air Act

This product does not contain any hazardous air pollutants, as defined by the US Clean Air Act.

Clean Water Act

This product does not contain any hazardous substances listed under the US Clean Water Act.

US State Regulations

Chemical Name	Massachusetts-RTK	New Jersey-RTK	Pennsylvania-RTK	Illinois-RTK	Rhode Island-RTK
2-butoxyethanol	X	X	X	-	-

California Proposition 65

This product does not contain any Proposition 65 chemicals.

Substances listed under Annex I of Regulation (EC) No 689/2008

None.

Restricted substances under Annex V of Regulation (EC) No 689/2008

None.

Substances under Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC

None.

Other countries

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS
Tetrasodium ethylene diamine tetraacetate	ACTIVE	X	-	X	-
2-butoxyethanol	ACTIVE	X	-	X	-

Chemical Name	ENCS	IECSC	KECL	PICCS	AIIC
Tetrasodium ethylene diamine tetraacetate	X	X	X	X	X
2-butoxyethanol	X	X	X	X	X

15.2 Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16. OTHER INFORMATION

Disclaimer

The above information is believed to be correct but shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since Molecular Instruments, Inc. cannot control the actual methods, volumes, or conditions of use, Molecular Instruments, Inc. shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein. The information in this safety data sheet (SDS) does not constitute a warranty, expressed or implied, including any implied warranty of merchantability or fitness for any particular purpose. See www.hcrimaging.com/legal/terms for our terms of sale.