

SECTION 1: Product and Company Identification

Identification of the substance or mixture

Catalog #: 10614
Product Name: BLOTTO Blocking Buffer (5% Milk Protein)

Company Identification

Cepharm Life Sciences Inc.
11830 W Market Place, Suite K
Fulton, MD 20759
USA
Toll Free: 1-800-257-1565
Phone: 410-636-4954

24-hour Emergency Response for Hazardous Materials [or Dangerous Goods] Incident, Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Toll Free: 1-800-424-9300/ +1 703-527-3887 CCN 1010970

For Research Use Only. Not for use in diagnostic procedures.

SECTION 2: Hazards identification

Classification of the substance or mixture

Not a hazardous substance or mixture.

GHS Label elements, including precautionary statements

Not a hazardous substance or mixture.

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

SECTION 3: Composition / Information on Ingredients

Component	CAS-No.	EINECS-No	Weight percent	REACH registration number	Classification according to Regulation (EC) No 1272/2008 [CLP]
Sodium tetraborate decahydrate 1303-96-4 (<8.5)	1303-96-4	-	<8.5	-	Repr. 1 – H360B

SECTION 4: First Aid Measures

Description of first aid measures

Skin contact

Rinse with plenty of water. Immediate medical attention is not required.

Eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

INGESTION

Not expected to present a significant ingestion hazard under anticipated conditions of normal use. If you feel unwell, seek medical advice.

Inhalation

Not expected to be an inhalation hazard under anticipated conditions of normal use of this material. Consult a physician if necessary.

Notes to Physician
Treat symptomatically.

Most important symptoms and effects, both acute and delayed
Not applicable.

Indication of any immediate medical attention and special treatment needed
None.

SECTION 5: Firefighting Measures

Extinguishing media

Suitable Extinguishing Media
Water spray. Carbon dioxide (CO₂). Foam. Dry chemical.

Unsuitable Extinguishing Media
No information available.

Special hazards arising from the substance or mixture
Not known.

Advice for fire-fighters
Standard procedure for chemical fires

SECTION 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Always wear recommended Personal Protective Equipment. Use personal protection equipment. See Section 8 for more detail.

Environmental precautions

No special environmental precautions required.

Methods and material for containment and cleaning up

Soak up with inert absorbent material.

Reference to other sections

See section 8 for more information

SECTION 7: Handling & Storage

Precautions for safe handling

Use personal protective equipment as required. No special handling advices are necessary.

Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place. Keep in properly labelled containers.

Specific end use(s)

Use as laboratory reagent. Scientific research and development.

SECTION 8: Exposure Controls / Personal Protection

Control parameters

Engineering measures

Ensure adequate ventilation, especially in confined areas.

Exposure controls

Personal protection equipment

Respiratory protection

In case of insufficient ventilation wear respirators and components tested and approved under appropriate government standards.

Hand Protection

Wear suitable gloves
Glove material: Compatible chemical-resistant gloves.

Eye protection

Tight sealing safety goggles.

Skin and body protection

Wear suitable protective clothing.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls

No special environmental precautions required.

SECTION 9: Physical and Chemical Properties

Information on basic physical and chemical properties

a) Appearance	Form: liquid
b) Odor	No data available
c) Odor Threshold	No data available
d) pH	No data available
e) Melting point/freezing point	No data available
f) Initial boiling point and boiling range	No data available
g) Flash point	No data available
h) Evaporation rate	no data available
i) Flammability (solid, gas)	no data available
j) Upper/lower flammability or explosive limits	no data available
k) Vapor pressure	No data available
l) Vapor density	No data available
m) Relative density	No data available
n) Water solubility	Slightly soluble
o) Partition coefficient: n-octanol/water	No data available
p) Auto-ignition temperature	No data available
q) Decomposition temperature	No data available
r) Viscosity	No data available
s) Explosive properties	no data available
t) Oxidizing properties	No data available

Other safety information

No data available

SECTION 10: Stability & Reactivity

Reactivity

None known.

Chemical stability

Stable under normal conditions.

Possibility of hazardous reactions

Hazardous reaction has not been reported.

Conditions to Avoid

No information available.

Incompatible Materials

No dangerous reaction known under conditions of normal use.

Hazardous decomposition products

no data available.

SECTION 11: Toxicological Information

Information on toxicological effects

Chemical name	LD50 (oral, rat/mouse)	LD50 (dermal, rat/rabbit)	LC50 (inhalation, rat/mouse)
Sodium tetraborate decahydrate	= 2660 mg/kg (Rat) = 3493 mg/kg (Rat)	no data available	no data available

Principle Routes of Exposure, Potential health effects

Irritation

Conclusive but not sufficient for classification

Corrosivity

Conclusive but not sufficient for classification

Sensitization

Conclusive but not sufficient for classification

STOT - Single Exposure

Conclusive but not sufficient for classification

STOT - Repeated Exposure

Conclusive but not sufficient for classification

Carcinogenicity

Conclusive but not sufficient for classification

Mutagenicity

Conclusive but not sufficient for classification

Reproductive toxicity

Conclusive but not sufficient for classification

SECTION 12: Ecological Information

Toxicity

Chemical Name	Freshwater Algae Data	Water Flea Data	Freshwater Fish Species Data	Microtox Data	Log Pow
Sodium tetraborate decahydrate	Desmodesmus subspicatus EC50=158 mg/L (96h) Pseudokirchneriella subcapitata EC502.6 - 21.8 mg/L (96 h)	Daphnia magna LC501085 - 1402 mg/L (48 h)	no data available	no data available	no data available

Persistence and degradability

No information available.

Bioaccumulative potential

No information available.

Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other adverse effects

No information available.

SECTION 13: Disposal Considerations

Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in according to approved disposal technique. Disposal of this product, its solutions or of any by-products, shall comply with the requirements of all applicable local, regional or national/federal regulations.

SECTION 14: Transport Information

IATA / ADR / DOT-US / IMDG

Not classified as dangerous in the meaning of transport regulations.

UN Number	Not applicable
UN proper shipping name	Not applicable
Transport hazard class(es)	Not applicable
Packing group	Not applicable
Environmental Hazards	Not applicable
Special precautions for user	Not applicable

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable.

SECTION 15: Regulatory Information

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

Substances of Very High Concern

Chemical Name	Weight Percent	EU - REACH (1907/2006) - Article 59(1) - Candidate List of Substances for Eventual Inclusion in Annex XIV
Sodium tetraborate decahydrate	<8.5	Reason for inclusion: Toxic for reproduction, Article 57c

Restricted substances under EC 1907/2006, Annex XVII

Chemical Name	Weight Percent	EU - REACH (1907/2006) – Annex XVII – Restrictions on Certain Dangerous Substances
Sodium tetraborate decahydrate	<8.5	Use restricted. See item 30.

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.

Chemical Safety Assessment

No Chemical safety assessment has been carried out.

SECTION 16: Other Information

Disclaimer:

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It does not represent any guarantee of the properties of the product. Cepham Life Sciences Incorporated and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product.