

SECTION 1: Product and Company Identification

Identification of the substance or mixture

Product Name: RAB Buffer
Catalog #: 10402, 10402-1

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

GHS-US classification
 Not classified

GHS Label elements, including precautionary statements

GHS-US labeling
 No labeling applicable

Other hazards which do not result in classification

No additional information available

Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition / Information on Ingredients

Substances

Not applicable

Mixtures

Name	Common Name (Synonyms)	Product Identifier	%	GHS-US classification
2-morpholinoethanesulfonic acid, monohydrate	2-(N-morpholino)ethanesulfonic acid / 2-morpholinoethanesulfonic acid monohydrate / 4-morpholineethanesulfonic acid monohydrate	(CAS-No.) 145224-94-8	2-5	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
sodium fluoride	alcoa sodium fluoride / antibulit / caribium / cavi-trol / chemifluor / credo / disodium difluoride / duraphat / F1-tabs / FDA 0101 / floridine / florocid / flozenges / fluoral / fluoride of sodium / fluorident / fluoridine / fluorigard /	(CAS-No.) 7681-49-4	0.05 – 0.5	Acute Tox. 3 (Oral), H301 Skin Irrit. 2, H315 Eye Irrit. 2, H319

	fluorineed / fluorinse / fluoritab / fluorocid / fluor-O-kote / fluorol / fluoros / flura / flura drops / fluragel / flura-loz / flurcare / flursol / fungol B / GEL II / geluton / gleem / iradicav / karidium / karigel / karinse / lea-cov / lemoflur / luride / luride lozi-tabs / luride-SF / Na frinse / nafeen / nafpak / nat. villiaumite / Natriumfluorid / nufleur / ossalin / ossin / osteoflur / pediaflor / pedident / pennwhite / pergantene / phos-flur / point two / predent / raflur / rescue squad / Roach salt / sodium fluoride (NaF) / sodium fluoride cyclic dimer / sodium fluoride, solid / Sodium fluoride, solid / sodium hydrofluoride / sodium monofluoride / SO-Flo / stay-flo / studaflur / super-dent / T- fluoride / thera-flur / thera-flur-N / trisodium trifluoride / villiaumite (=sodium fluoride) / villiaumite (=sodium fluoride), natural / villiaumite (=sodium fluoride) / zymaflur		
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Full text of hazard classes and H-statements: see section 16

SECTION 4: First Aid Measures

Description of first aid measures

First-aid measures after inhalation:	Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact:	Wash skin with plenty of water.
First-aid measures after eye contact:	Rinse eyes with water as a precaution.
First-aid measures after ingestion:	Call a poison center/doctor/physician if you feel unwell.

Most important symptoms and effects, both acute and delayed

No additional information available

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting Measures

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media:	Water spray. Dry powder. Foam. Carbon dioxide.
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Specific hazards arising from the chemical

Reactivity:	The product is non-reactive under normal conditions of use, storage and transport.
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Special protective equipment and precautions for fire-fighters

Protection during firefighting:	Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
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SECTION 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Emergency procedures: Ventilate spillage area.

For emergency responders

Protective equipment: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

Environmental precautions

Avoid release to the environment.

Methods and materials for containment and cleaning up

Methods for cleaning up: Take up liquid spill into absorbent material.
Other information: Dispose of materials or solid residues at an authorized site.

Reference to other sections

For disposal see section 13.

SECTION 7: Handling & Storage

Precautions for safe handling

Precautions for safe handling: Ensure good ventilation of the work station. Wear personal protective equipment.
Hygiene measures: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

Conditions for safe storage, including any incompatibilities

Storage conditions: Store in a well-ventilated place. Keep cool.
Storage temperature: 4 °C

SECTION 8: Exposure Controls / Personal Protection

Control parameters

2-morpholinoethanesulfonic acid, monohydrate (145224-94-8) Not applicable

Sodium fluoride (7681-49-4)

ACGIH ACGIH TWA (mg/m³) 2.5 mg/m³ (Fluorides, as F; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)

Appropriate engineering controls

Appropriate engineering controls: Ensure good ventilation of the work station.
Environmental exposure controls: Avoid release to the environment.

Individual protection measures/Personal protective equipment

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

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) Vapour pressure	No data available
l) Vapour density	No data available
m) Relative density	No data available
n) Water solubility	No data available
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 additional information available

SECTION 10: Stability & Reactivity

Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

Chemical stability

Stable under normal conditions.

Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

Conditions to avoid

None under recommended storage and handling conditions (see section 7).

Incompatible materials

No additional information available

Hazardous decomposition products

Hazardous decomposition products.

SECTION 11: Toxicological Information

Information on toxicological effects

Acute toxicity

No data available

sodium fluoride (7681-49-4)	
LD50 oral rat	52 mg/kg (Rat)
ATE US (oral)	100 mg/kg body weight

Skin corrosion/irritation:	Not classified
Serious eye damage/irritation:	Not classified
Respiratory or skin sensitization:	Not classified
Germ cell mutagenicity:	Not classified
Carcinogenicity:	Not classified

Sodium fluoride (7681-49-4)	
IARC group	3 – Not classifiable

Reproductive toxicity:	Not classified
Specific target organ toxicity – single exposure:	Not classified
Specific target organ toxicity – repeated exposure:	Not classified
Aspiration hazard:	Not classified

SECTION 12: Ecological Information

Toxicity

Ecology - general: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

Sodium fluoride (7681-49-4)	
LC50 fish 1	>530 mg/l (LC50; 96h)
EC50 Daphnia 1	98 mg/l (EC50; 48 h)

Persistence and degradability

2-morpholinoethanesulfonic acid, monohydrate (145224-94-8)	
Persistence and degradability	Biodegradability in water: no data available.
Sodium fluoride (7681-49-4)	
Persistence and degradability	Biodegradability: not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable

Bioaccumulative potential

2-morpholinoethanesulfonic acid, monohydrate (145224-94-8)	
Bioaccumulative potential	No bioaccumulation data available
Sodium fluoride (7681-49-4)	
BCF fish 1	2.3 (BCF)
Bioaccumulative potential	Not Bioaccumulative.

Mobility in soil

Sodium fluoride (7681-49-4)	
Ecology – soil	Toxic to flora

Other adverse effects

Effect on the global warming: No known effects from this product.
 GWPmix comment: No known effects from this product

SECTION 13: Disposal Considerations**Waste treatment methods****Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport Information**DOT (US)**

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

SECTION 15: Regulatory Information**US Federal Regulations**

2-morpholinoethanesulfonic acid, monohydrate (145224-94-8)	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	
sodium fluoride (7681-49-4)	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	
Not subject to reporting requirements of the United States SARA Section 313	
CERCLA RQ	1000 lb

International regulations**CANADA**

No additional information available

EU-Regulations

No additional information available

National regulations

No additional information available

US State regulations

No additional information available

SECTION 16: Other Information

Full text of H-phrases:

H301	Toxic if swallowed
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation

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.