

SECTION 1: IDENTIFICATION

1.1 Product Identifier

Product Name HCR™ Antibody Buffer

1.2 Product identified uses of the substance or mixer 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.
5015 Eagle Rock Blvd Suite 301
Los Angeles, CA 90041
Telephone Tel: (626) 210-2600

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

GHS Classification

Health Hazards

Acute toxicity, Oral	Category 4, H302
Acute toxicity, Inhalation	Category 4, H302
Skin corrosion	Category 1, H314
Serious eye damage	Category 1, H318
Skin sensitization	Category 1, H317
Short-term (acute) aquatic hazard	Category 1, H400
Long-term (chronic) aquatic hazard	Category 1, H410

2.2 Label elements including precautionary statements



Signal Word

Danger

Hazard Statements

H302+H332
H314
H317
H410

Harmful if swallowed or if inhaled
Causes severe skin burns and eye damage
May cause an allergic skin reaction
Very toxic to aquatic life with long lasting effects

Precautionary Statements

P261	Avoid breathing gust/fume/gas/mist/vapors/spray
P264	Wash skin thoroughly after handling
P270	Do not eat, drink or smoke when using this product
P271	Use only outdoors or in a well-ventilated area
P272	Contaminated work clothing must not be allowed out of the workplace
P273	Avoid release to the environment
P280	Wear protective gloves/protective clothing/eye protection/face protection
P301+P312+P330	If swallowed: Call a poison center/doctor if you feel unwell. Rinse mouth
P301+P330+P331	If swallowed: Rinse mouth. Do not induce vomiting
P303+P361+P353	If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
P304+P340+P310	If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center/doctor
P305+P351+P338+ P310	If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P363	Wash contaminated clothing before reuse
P391	Collect spillage
P405	Store locked up
P501	Dispose of contents/container to an approved waste disposal plant

2.3 Other hazards not covered by GHS

None

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS
3.1 Chemical Characterization

Mixtures

3.2 Dangerous Components

Chemical Name	CAS-No	EINECS-No	Weight %
Triton X-100	9002-93-1	618-344-0	<1%
Modified alkyl carboxylate	-	-	> = 5 - < 10%
Mixture of 5-Chloro-2-Methyl-4-isothiazolin-3-one and 2-Methyl-2H-isothiazol-3-one (3:1)	55965-84-9	911-418-6	> = 1 - < 5%

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. Show this material safety data sheet to the doctor in attendance.

Inhalation

Allow victim to breath fresh air. Allow the victim to rest. Get medical attention if symptoms occur. Immediately call-in physician. If breathing stops, immediately apply artificial respiration, if necessary, also oxygen.

Ingestion

Rise mouth. Do not induce vomiting (risk of perforation). Consult a physician. After swallowing, make victim drink water (two glasses at most). Do not attempt to neutralize.

Skin Contact

Take off immediately all contaminated clothing. Rinse skin with plenty of water/shower. Call a physician immediately.

Eye Contact

Rinse immediately with plenty of water, also under the eyelids. Remove contact lenses if present. Immediately call in ophthalmologist.

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.

No data available.

SECTION 5. FIRE-FIGHTING MEASURES

5.1 Extinguishing Media**Suitable extinguishing media**

Water foam carbon dioxide (CO₂) dry powder

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards

Carbon oxides
Nitrogen oxides (NO_x)
Sulfur oxides
Hydrogen chloride gas
Combustible
Vapors are heavier than air and may spread along floors
Forms explosive mixtures with air on intense heating
Development of hazardous combustion gases or vapors possible in the event of fire

5.3 Advice for fire fighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

5.4 Further information

Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

For personal protection, see Section 8.

6.2 Environmental Precautions

Should not be released into the environment. Prevent product from entering drains.

6.3 Methods and material for containment and clean up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see Sections 7 and 10). Take up with liquid-absorbent and neutralizing material. Dispose of properly. Clean up affected area.

6.4 Reference to other sections

For disposal, see Section 13.

SECTION 7. HANDLING AND STORAGE**7.1 Precautions for safe handling**

Work under hood. Do not inhale substance/mixture. Avoid generation of vapors/aerosols. Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.
For precautions, see Section 2.2.

7.2 Conditions for safe storage, including and incompatibles

Keep container tightly closed in a dry and well-ventilated place. Storage class (TRGS 510): 8A: Combustible, corrosive hazardous materials.

7.3 Specific end use(s)

For research use only. Not for diagnostic use.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1 Control parameters**

Exposure Limits

Contains no substances with occupational exposure limit values.

Engineering Measures

Ensure adequate ventilation, especially in confined areas. Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Personal Protective Equipment

Eye/Face Protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU). Tightly fitting safety goggles.

Skin Protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in

accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact

Material: Butyl-rubber

Minimum layer thickness: 0.3 mm

Break through time: 480 min

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 60 min

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the EC approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Lightweight protective clothing.

Recommended Filter Type: Filter type ABEK

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented. Required when vapors/aerosols are generated. Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Body Protection

Respiratory Protection

Environmental Exposure Controls

Should not be released in the environment. Prevent product from entering drains.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance:

Form: Liquid

Color: Light Yellow

Odor:

No data available.

Odor threshold:

No data available.

pH:

No data available.

Melting point/freezing point:	No data available.
Initial boiling point and boiling range:	No data available.
Flash point:	No data available.
Evaporation rate:	No data available.
Flammability rate:	No data available.
Upper/lower flammability or explosive limits:	No data available.
Vapor pressure:	No data available.
Vapor density:	No data available.
Relative density:	No data available.
Solubility(ies):	No data available.
Partition coefficient:	No data available.
Auto-ignition temperature:	No data available.
Decomposition temperature:	No data available.
Viscosity:	No data available.

9.2 Other information

No data available.

SECTION 10. STABILITY AND REACTIVITY**10.1 Reactivity**

Forms explosive mixtures with air on intense heating.

A range from approximately 15 Kelvin below the flash point is to be rated as critical.

10.2 Chemical Stability

Chemically stable under standard ambient conditions (room temperature).

10.3 Possibility of hazardous reactions

No data available.

10.4 Conditions to avoid

Strong heating.

10.5 Incompatible materials

Strong oxidizing agents, reducing agents, amines, mercaptans.

10.6 Hazardous decomposition products

In the event of fire: see Section 5.

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)
Triton X-100	1800 mg/kg	Not Listed	Not Listed
Mixture	862 mg/kg	2,800 mg/kg	13.89 mg/L (4 H) Aerosol
Modified alkyl carboxylate	Not Listed	Not Listed	Not Listed
Mixture of 5-Chloro-2-Methyl-4-isothiazolin-3-one and 2-Methyl-2H-isothiazol-3-one (3:1)	66 mg/kg	87.12 mg/kg	0.171 mg/L (4H) Aerosol

Principle Routes of exposure

Inhalation
 Ingestion
 Skin contact

 Eye contact

May be harmful inhaled.
 May be harmful if swallowed.
 May cause skin irritation in susceptible persons. Mixture causes burns.
 Mixture may cause serious eye damage. Risk of blindness.

Potential Health Effects

Carcinogenetic effects
 Mutagenic effects
 Reproductive toxicity
 Sensitization

 Target organ effects
 Other adverse effect

No data available.
 No data available.
 No data available.
 May cause sensitization by skin contact. Mixture may cause an allergic skin reaction.
 No data available.
 No data available.

SECTION 12. ECOLOGICAL INFORMATION
12.1 Ecotoxicity

Chemical Name	Water Flea Data	Freshwater Fish Species Data	Log Pow
Triton X-100	EC50 26 mg/L (48 H)	LC50 89.9 mg/L (96 H) Pimephales promelus LC50 4.0 mg/L (96h)	2.7
Mixture	-	-	-
Modified alkyl carboxylate	-	-	-
Mixture of 5-Chloro-2-Methyl-4-isothiazolin-3-one and 2-Methyl-2H-isothiazol-3-one (3:1)	LC50 0.18 mg/L (48 H) NOEC 0.1 mg/L (21 D)	LC50 0.19 mg/L (96 H) Oncorhynchus mykiss NOEC 0.098 mg/L (35 D) Oncorhynchus mykiss	-

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulation potential

No data available.

12.4 Mobility in the soil

No data available.

12.5 Other adverse effects

No data available.

SECTION 13. DISPOSAL CONSIDERATIONS**13.1 Waste treatment methods**

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

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 shipping name 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****US Federal Regulations****SARA 302**

This product does not contain any components with a Section 302 EHS TPO.

SARA 313

This product does not contain any chemical components with known CAS numbers that exceed the threshold reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

Acute Health Hazard

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contain HAPs.

WHMIS Hazard Class
D2B - Toxic materials

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

Chemical Name	CAS-No	Weight %
Triton X-100	9002-93-1	<1

California Proposition 65

This product does not contain any Proposition 65 chemicals.

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

International Regulations

Chemical Name	Canada - National Pollutant Release Inventory (NPRI)	Canadian Environmental Protection Agency (CEPA) - List of Toxic Substances	Canada's Chemicals Management Plan (CEPA)
Triton X-100	Part 1, Group A Substance	-	-

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.molecularinstruments.com/terms for our terms of sale.