



SECTION 1: IDENTIFICATION

1.1 Product Identifier

Product Name

HCR™ HiFi Encoder B

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

Supplier

Molecular Instruments, Inc.
5015 Eagle Rock Blvd Suite 301
Los Angeles, CA 90041
Tel: (626) 210-2600

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Not a hazardous substance of mixture.

2.2 GHS label elements including precautionary statements

Not a hazardous substance of mixture.

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 %
Glycerol	56-81-5	200-289-5	30-60
Sodium azide	26628-22-8	247-852-1	<0.1

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

Water fog. Carbon dioxide (CO₂). Foam. Dry extinguishing powder.

5.2 Special hazards

In case of fire may be liberated: Pyrolysis products, toxic. Carbon dioxide. Carbon monoxide.

5.3 Advice for fire fighters

Coordinate firefighting measures to the fire surroundings. Wear self-contained breathing apparatus and protective suit.

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 and incompatibles

Keep container tightly closed in a dry and well-ventilated place. Keep away from combustible material as well strong acids and strong bases. Keep away from food and drink. Protect pressurized gas bottles against overturning.

7.3 Specific end use(s)

For research use only.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Exposure Limits

Does not contain substances above concentration limits fixing an occupational exposure limit.

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 Chemical Stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

Heat. UV radiation/sunlight.

10.5 Incompatible materials

Oxidizing agents. Reducing agents. Acids. Alkalis.

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)
Glycerol	12600 mg/kg	>10 g/kg	>2.75 mg/L/\$h
Sodium azide	27 mg/kg (rat)	20 mg/kg (rabbit)	-

Principle Routes of exposure

Inhalation

Ingestion

Skin contact

Eye contact

May be harmful inhaled

May be harmful if swallowed.

Frequently or prolonged contact with skin may cause dermal irritation.

May cause eye irritation in susceptible persons.

Carcinogenetic effects

Mutagenic effects

Reproductive toxicity

Sensitization

Target organ effects

Other adverse effect

None

None

None

None

None

None

SECTION 12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity

Chemical Name	Freshwater Algae Data	Water Flea Data	Freshwater Fish Species Data
Glycerol	-	EC50: >500 mg/L (24 h) (D. magna)	LC50: 51-57 mL/L (96 h) (O. mykiss)
Sodium azide	EC50: 0.348 mg/L (96 h)	-	LC50: 2.8 mg/L (96 h) (P. promelas)

12.2 Persistence and degradability

Product is biodegradable.

12.3 Bioaccumulation potential

No indication of bioaccumulation potential.



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

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

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

EU Legislation

Regulation (EC) No. 1005/2009 on substances that lead to the depletion of the ozone layer
Not relevant

Regulation (EU) No. 649/2012 on the export and import of dangerous chemicals
None

The substance/product is registered with strictly controlled conditions as defined in Article 18(4) of Regulation (EC) No. 1907/2006 (REACH Regulation) and must therefore be handled as such.
None

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
Glycerol	Listed	Listed	Listed	-	Listed

California Proposition 65

This product does not contain any Proposition 65 chemicals.

15.2 Chemical safety assessment

No data available.

SECTION 16. OTHER INFORMATION

Abbreviations and acronyms

TWA - Time-Weighted Average

OELs - Occupational Exposure Limits

STEL - Short Term Exposure Limit

OSHA - Occupational Safety and Health Administration of the US Department of Labor

ACGIH - American Conference of Governmental Industrial Hygienists

NIOSH - National Institute for Occupational Safety and Health

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.