Inactivated Molecular Liquid Standard Preparations

Safety Data Sheet

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name : Inactivated Molecular Liquid Standard Preparations
Trade names : Helix Elite Molecular Standard

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

1.2.1. Relevant identified uses

Use of the substance/mixture : Molecular Standards are used as controls for developing, validating, and monitoring molecular instruments and assays.

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Microbiologics, Inc.
200 Cooper Avenue North
Saint Cloud, MN 56303
+1.320.253.1640
info@microbiologics.com

1.4. Emergency telephone number

24 hour Emergency Number: +44 1865 407333 (Carechem - English)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

No labelling applicable

2.3. Other hazards

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/Information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Glycerin	(CAS No) 56-81-5 (EC no) 200-289-5	99	Not classified
Water	(CAS No) 7732-18-5 (EC no) 231-791-2	1	Not classified

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing.

First-aid measures after skin contact : Wash affected area with soap and water. Seek medical attention if irritation develops or persists.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation persists, get medical advice/attention.

First-aid measures after ingestion : Avoid hand to mouth contact. If ingested, seek medical advice.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/injuries after inhalation : None anticipated under normal product handling.

Symptoms/injuries after skin contact : May cause skin irritation.

Symptoms/injuries after eye contact : May cause eye irritation.

Symptoms/injuries after ingestion : May be harmful if swallowed.

4.3. Immediate medical attention and special treatment, if necessary

No additional information available

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media : Use suitable extinguishing media for surrounding fire.

Unsuitable extinguishing media : None.

5.2. Special hazards arising from the substance or mixture

Fire hazard : None.

Explosion hazard : None.

Hazardous decomposition products in case of fire : Not determined.

5.3. Advice for firefighters

Protection during firefighting : Firefighters should wear full protective gear.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Stop the flow of material, if this is without risk.

Methods for cleaning up : Confine spill and soak up with absorbent. Place in an approved container and dispose in accordance with local, state and federal regulations.

6.4. Reference to other sections

For further information refer to section 13. See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store at -65°C to -85°C.

Incompatible materials : Not determined.

7.3. Specific end use(s)

Molecular Standards are used as controls for developing, validating, and monitoring molecular instruments and assays.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Glycerin (56-81-5)		
Belgium	Limit value (mg/m³)	10 mg/m³ (mist)
Croatia	GVI (granična vrijednost izloženosti) (mg/m³)	10 mg/m³
Czech Republic	Expoziční limity (PEL) (mg/m³)	10 mg/m³
Estonia	OEL TWA (mg/m³)	10 mg/m³
Finland	HTP-arvo (8h) (mg/m³)	20 mg/m³
France	VME (mg/m³)	10 mg/m³ (aerosol)
Germany	TRGS 900 Occupational exposure limit value (mg/m³)	200 mg/m³ (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed-inhalable fraction)
Greece	OEL TWA (mg/m³)	10 mg/m³
Ireland	OEL (8 hours ref) (mg/m³)	10 mg/m³ (mist)
Ireland	OEL (15 min ref) (mg/m3)	30 mg/m³ (calculated-mist)
Poland	NDS (mg/m³)	10 mg/m³ (inhalable fraction)
Portugal	OEL TWA (mg/m³)	10 mg/m³ (mist)
Spain	VLA-ED (mg/m³)	10 mg/m³ (mist)
United Kingdom	WEL TWA (mg/m³)	10 mg/m³ (mist)
United Kingdom	WEL STEL (mg/m³)	30 mg/m³ (calculated-mist)
Switzerland	MAK (mg/m³)	50 mg/m³ (inhalable dust)
Switzerland	KZGW (mg/m³)	100 mg/m³ (inhalable dust)
Australia	TWA (mg/m³)	10 mg/m³ (containing no asbestos and <1% crystal-line silica-inhalable dust, mist)
Canada (Quebec)	VEMP (mg/m³)	10 mg/m³ (mist)
USA - OSHA	OSHA PEL (TWA) (mg/m³)	15 mg/m³ (mist, total particulate) 5 mg/m³ (mist, respirable fraction)

8.2. Exposure controls

Appropriate engineering controls : Local exhaust and general ventilation must be adequate to meet exposure standards. Restrict access to the area. Use under the direct supervision of, persons trained and competent in microbiological techniques. Good laboratory practices must be observed and followed.
Hand protection : Wear general protective gloves.
Eye protection : Safety glasses with side shields.
Skin and body protection : Wear suitable working clothes.
Respiratory protection : If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn.
Thermal hazards : No additional information available
Environmental exposure controls : Avoid release to the environment. Notify authorities if product enters sewers or public waters.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Color : Colorless
Odor : Odorless.
Odor threshold : No data available
pH : No data available
Relative evaporation rate (butylacetate=1) : No data available
Melting point : No data available
Freezing point : No data available
Boiling point : No data available
Flash point : No data available
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Flammability (solid, gas) : No data available
Vapor pressure : No data available

Relative vapor density at 20 °C	:	No data available
Relative density	:	No data available
Solubility	:	No data available
Log Pow	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available
Explosive properties	:	No data available
Oxidising properties	:	No data available
Explosive limits	:	No data available
Particle characteristics	:	Not applicable

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Will not occur.

10.4. Conditions to avoid

Extremes of temperature and direct sunlight.

10.5. Incompatible materials

Strong oxidizing agents. Strong bases.

10.6. Hazardous decomposition products

None.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	:	Not classified
Acute toxicity (dermal)	:	Not classified
Acute toxicity (inhalation)	:	Not classified

Water (7732-18-5)	
LD50 oral rat	> 90 ml/kg
Glycerin (56-81-5)	
LD50 oral rat	12600 mg/kg
LD50 dermal rabbit	> 10 g/kg
LC50 inhalation rat (mg/l)	> 570 mg/m³ (Exposure time: 1 h)

Skin corrosion/irritation	:	Not classified
Serious eye damage/irritation	:	Not classified
Respiratory or skin sensitisation	:	Not classified
Germ cell mutagenicity	:	Not classified
Carcinogenicity	:	Not classified
Reproductive toxicity	:	Not classified
Specific target organ toxicity (single exposure)	:	Not classified
Specific target organ toxicity (repeated exposure)	:	Not classified
Aspiration hazard	:	Not classified

11.2. Information on other hazards

Endocrine disrupting properties	:	No additional information available
Potential adverse human health effects and symptoms	:	No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Acute aquatic toxicity : Not classified
Chronic aquatic toxicity : Not classified

Glycerin (56-81-5)	
LC50 fish 1	51 - 57 ml/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])

12.2. Persistence and degradability

No additional information on components is available

12.3. Bioaccumulative potential

Glycerin (56-81-5)	
BCF fish 1	(no bioaccumulation)
Log Pow	-1.76

12.4. Mobility in soil

No additional information on components is available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose of contents/container in accordance with local/regional/national/international regulations.

SECTION 14 Transport Information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No. (ADR) : Not applicable
UN-No. (IMDG) : Not applicable
UN-No. (IATA) : Not applicable
UN-No. (ADN) : Not applicable
UN-No. (RID) : Not applicable

14.2. UN proper shipping name

Proper Shipping Name (ADR) : Not applicable
Proper Shipping Name (IMDG) : Not applicable
Proper Shipping Name (IATA) : Not applicable
Proper Shipping Name (ADN) : Not applicable
Proper Shipping Name (RID) : Not applicable

14.3. Transport hazard class(es)

ADR
Transport hazard class(es) (ADR) : Not applicable
IMDG
Transport hazard class(es) (IMDG) : Not applicable
IATA
Transport hazard class(es) (IATA) : Not applicable
ADN
Transport hazard class(es) (ADN) : Not applicable
RID
Transport hazard class(es) (RID) : Not applicable

14.4. Packing group

Packing group (ADR)	:	Not applicable
Packing group (IMDG)	:	Not applicable
Packing group (IATA)	:	Not applicable
Packing group (ADN)	:	Not applicable
Packing group (RID)	:	Not applicable

14.5. Environmental hazards

Dangerous for the environment	:	No
Marine pollutant	:	No
Other information	:	No supplementary information available

14.6. Special precautions for user

Overland transport	:	Not applicable
Transport by sea	:	Not applicable
Air transport	:	Not applicable
Inland waterway transport	:	Not applicable
Rail transport	:	Not applicable

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no substances with Annex XVII restrictions
Contains no substance on the REACH candidate list
Contains no REACH Annex XIV substances

15.1.2. National regulations

Germany

AwSV/VwVwS Annex reference	:	Water hazard class (WGK) 2, hazard to waters (Classification according to AwSV, Annex 1)
12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV	:	Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

Netherlands

SZW-lijst van kankerverwekkende stoffen	:	None of the components are listed
SZW-lijst van mutagene stoffen	:	None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding	:	None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid	:	None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling	:	None of the components are listed

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

No additional information available

Revisions to this SDS document can be presented upon request.

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 should not therefore be construed as guaranteeing any specific property of the product