Inactivated Molecular Standards Lyophilized Material Preparations

Safety Data Sheet

SECTION 1: Identification

1.1. Product identifier

Product name : Inactivated Molecular Standards Lyophilized Material Preparations

Trade names : Helix Elite™ Molecular Standard Synthetic RNA
Helix Elite™ Molecular Standard Synthetic DNA
Helix Elite™ Molecular Standard Genomic DNA
Helix Elite™ Molecular Inactivated Standard

1.2. Recommended use and restrictions on use

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

1.3. Supplier

Microbiologics, Inc.
200 Cooper Avenue North
Saint Cloud, MN 56303

1.4. Emergency telephone number

+1.320.253.1640

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Classification (GHS- CAN/US)

Not classified

2.2. GHS Label elements, including precautionary statements

GHS-CAN/US labeling

No labeling applicable

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity

No data available

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS-CAN Classification	GHS-US classification
Sucrose	(CAS No) 57-50-1	45 - 60	Not classified	Not classified
Water	(CAS No) 7732-18-5	4 - 15	Not classified	Not classified
Gelatin	(CAS No) 9000-70-8	10 - 15	Not classified	Not classified
Phosphoric acid, potassium salt (1:1)	(CAS No) 7778-77-0	10 - 15	Not classified	Not classified
Skim milk (Bovine - USA origin)	None	9 - 12	Not classified	Not classified
L-Ascorbic acid	(CAS No) 50-81-7	2 - 5	Not classified	Not classified
Purified RNA	None	0 - 2	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
Purified DNA	None	0 - 1	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

First-aid measures after skin contact : Wash off with soap and plenty of water. Consult a physician.

First-aid measures after eye contact : Check for and remove any contact lenses. IMMEDIATELY flush eyes with running water for at least 15 minutes while keeping eyes open. COLD water may be used. Seek medical attention.

First-aid measures after ingestion : Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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

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

Symptoms/injuries after skin contact : None anticipated under normal product use.

Symptoms/injuries after eye contact : May causes 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. Suitable extinguishing media

Suitable extinguishing media : Water spray. Carbon dioxide, regular dry chemical powder, or appropriate foam.

5.2. Unsuitable extinguishing media

Unsuitable extinguishing media : None.

5.3. Specific hazards arising from the hazardous product

Fire hazard : None.

Explosion hazard : None.

5.4. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Firefighters should wear full protective gear.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

No additional information available

6.2. Methods and materials for containment and cleaning up

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

Methods for cleaning up : Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.3. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection"

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store at 2°C-25°C in the original, tightly closed container in a dry and well-ventilated place.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Sucrose (57-50-1)		
USA - ACGIH	ACGIH TWA (mg/m³)	10 mg/m³
USA - OSHA	OSHA PEL (TWA) (mg/m³)	15 mg/m³ (total dust) 5 mg/m³ (respirable fraction)
Canada (Quebec)	VEMP (mg/m³)	10 mg/m³
Alberta	OEL TWA (mg/m³)	10 mg/m³
British Columbia	OEL TWA (mg/m³)	10 mg/m³ (total dust)
Manitoba	OEL TWA (mg/m³)	10 mg/m³
New Brunswick	OEL TWA (mg/m³)	10 mg/m³
New Foundland & Labrador	OEL TWA (mg/m³)	10 mg/m³
Nova Scotia	OEL TWA (mg/m³)	10 mg/m³
Nunavut	OEL STEL (mg/m³)	20 mg/m³
Nunavut	OEL TWA (mg/m³)	10 mg/m³

Sucrose (57-50-1)		
Northwest Territories	OEL STEL (mg/m³)	20 mg/m³
Northwest Territories	OEL TWA (mg/m³)	10 mg/m³
Ontario	OEL TWA (mg/m³)	10 mg/m³
Prince Edward Island	OEL TWA (mg/m³)	10 mg/m³
Saskatchewan	OEL STEL (mg/m³)	20 mg/m³
Saskatchewan	OEL TWA (mg/m³)	10 mg/m³
Yukon	OEL STEL (mg/m³)	20 mg/m³
Yukon	OEL TWA (mg/m³)	30 mppcf

8.2. Exposure controls

Appropriate engineering controls : Maintain adequate ventilation at all times. In most circumstances, natural ventilation systems are adequate unless the material is heated, reacted or otherwise changed in some type of chemical reaction, then the use of a local exhaust ventilation system is recommended.

Hand protection : Handle with protective gloves. Inspect gloves for damage or imperfections prior to use. Use proper technique when removing gloves to avoid skin contact with the outer surface of the glove. Always wash hands after removal of gloves.

Eye protection : Safety glasses with side shields.

Skin and body protection : Wear protective clothing.

Respiratory protection : Respiratory protection is not required.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid or dried material on swab

Appearance : Freeze dried pellet or swab

Odor : Odorless

Odor threshold : No data available

pH : No data available

Melting point : No data available

Freezing point : No data available

Boiling point : No data available

Flash point : No data available

Relative evaporation rate (butyl acetate=1) : 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

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Viscosity, kinematic : No data available

Viscosity, dynamic : No data available

Explosion limits : No data available

Explosive properties : No data available

Oxidizing properties : No data available

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 normal ambient and anticipated storage and handling conditions.

10.3. Possibility of hazardous reactions

Will not occur.

10.4. Conditions to avoid

None.

10.5. Incompatible materials

Many chemicals may kill the organism enclosed. There are no additional hazards created by incompatible materials.

10.6. Hazardous decomposition products

Carbon and nitrogen oxides.

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

Sucrose (57-50-1)	
LD50 oral rat	29700 mg/kg

L-Ascorbic acid (50-81-7)	
LD50 oral rat	11900 mg/kg

Phosphoric acid, potassium salt (1:1) (7778-77-0)	
LD50 oral rat	3200 mg/kg

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
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

12.1. Toxicity

Aquatic acute : Not classified
Aquatic chronic : Not classified

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Ozone : Not classified
Effect on the ozone layer : No additional information available.

SECTION 13: Disposal considerations

13.1. Disposal methods

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

SECTION 14: Transport information

14.1. Basic shipping description

In accordance with TDG

TDG

Not regulated for transport

14.2. Transport information/DOT

DOT

Not regulated for transport

14.3. Air and sea transport

IMDG

Not regulated for transport

IATA

Not regulated for transport

SECTION 15: Regulatory information

15.1. Canada National regulations

Water (7732-18-5)
Listed on the Canadian DSL (Domestic Sustances List)

Sucrose (57-50-1)
Listed on the Canadian DSL (Domestic Sustances List)

L-Ascorbic acid (50-81-7)
Listed on the Canadian DSL (Domestic Sustances List)

Gelatin (9000-70-8)
Listed on the Canadian DSL (Domestic Sustances List)

Phosphoric acid, potassium salt (1:1) (7778-77-0)
Listed on the Canadian DSL (Domestic Sustances List)

15.2. US Federal regulations

Water (7732-18-5)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Sucrose (57-50-1)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

L-Ascorbic acid (50-81-7)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Gelatin (9000-70-8)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
EPA TSCA Regulatory Flag	XU - XU - indicates a substance exempt from reporting under the Inventory Update Reporting Rule, i.e, Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(C)).

Phosphoric acid, potassium salt (1:1) (7778-77-0)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.3. US State regulations

Sucrose (57-50-1)
U.S. - Massachusetts - Right To Know List U.S. - Minnesota - Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

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