

SAFETY DATA SHEET



Seahorse XFp Glycolysis Stress Test Kit, Part Number 103017-100

Section 1. Identification

1.1 Product identifier

Product name : Seahorse XFp Glycolysis Stress Test Kit, Part Number 103017-100

Part no. (chemical kit) : 103017-100

Part no. : 2-deoxyglucose Not available.
 Glucose Not available.
 Oligomycin Not available.

Validation date : 5/12/2023

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

Identified uses : For research use only.
 2-deoxyglucose 6 x 24.624 mg
 Glucose 6 x 5.405 mg
 Oligomycin 6 x 16.572 mg

Uses advised against : Not for use in diagnostic procedures (RUO).

1.3 Details of the supplier of the safety data sheet

Supplier/Manufacturer : Agilent Technologies, Inc.
 5301 Stevens Creek Blvd
 Santa Clara, CA 95051, USA
 800-227-9770

1.4 Emergency telephone number

In case of emergency : CHEMTREC®: 1-800-424-9300

Section 2. Hazards identification

2.1 Classification of the substance or mixture

OSHA/HCS status : 2-deoxyglucose	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
Glucose	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
Oligomycin	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

Classification of the substance or mixture

Not classified.

2.2 GHS label elements

Signal word :

Section 2. Hazards identification

	2-deoxyglucose	No signal word.
	Glucose	No signal word.
	Oligomycin	No signal word.
Hazard statements	: 2-deoxyglucose	No known significant effects or critical hazards.
	Glucose	No known significant effects or critical hazards.
	Oligomycin	No known significant effects or critical hazards.
<u>Precautionary statements</u>		
Prevention	: 2-deoxyglucose	Not applicable.
	Glucose	Not applicable.
	Oligomycin	Not applicable.
Response	: 2-deoxyglucose	Not applicable.
	Glucose	Not applicable.
	Oligomycin	Not applicable.
Storage	: 2-deoxyglucose	Not applicable.
	Glucose	Not applicable.
	Oligomycin	Not applicable.
Disposal	: 2-deoxyglucose	Not applicable.
	Glucose	Not applicable.
	Oligomycin	Not applicable.
Supplemental label elements	: 2-deoxyglucose	None known.
	Glucose	None known.
	Oligomycin	None known.
<u>2.3 Other hazards</u>		
Hazards not otherwise classified	: 2-deoxyglucose	None known.
	Glucose	None known.
	Oligomycin	None known.

Section 3. Composition/information on ingredients

Substance/mixture	: 2-deoxyglucose	Substance
	Glucose	Substance
	Oligomycin	Mixture

Ingredient name	%	CAS number
2-deoxyglucose		
2-deoxy-D-glucose	100	154-17-6
Glucose		
Glucose	100	50-99-7

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

4.1 Description of necessary first aid measures

Eye contact	:	2-deoxyglucose	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
		Glucose	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
		Oligomycin	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Inhalation	:	2-deoxyglucose	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
		Glucose	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
		Oligomycin	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Skin contact	:	2-deoxyglucose	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
		Glucose	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
		Oligomycin	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Ingestion	:	2-deoxyglucose	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
		Glucose	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
		Oligomycin	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

4.2 Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact	:	2-deoxyglucose	No known significant effects or critical hazards.
		Glucose	No known significant effects or critical hazards.
		Oligomycin	No known significant effects or critical hazards.

Section 4. First aid measures

Inhalation	: 2-deoxyglucose Glucose Oligomycin	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
Skin contact	: 2-deoxyglucose Glucose Oligomycin	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
Ingestion	: 2-deoxyglucose Glucose Oligomycin	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact	: 2-deoxyglucose Glucose Oligomycin	No specific data. No specific data. No specific data.
Inhalation	: 2-deoxyglucose Glucose Oligomycin	No specific data. No specific data. No specific data.
Skin contact	: 2-deoxyglucose Glucose Oligomycin	No specific data. No specific data. No specific data.
Ingestion	: 2-deoxyglucose Glucose Oligomycin	No specific data. No specific data. No specific data.

4.3 Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician	: 2-deoxyglucose Glucose Oligomycin	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	: 2-deoxyglucose Glucose Oligomycin	No specific treatment. No specific treatment. No specific treatment.
Protection of first-aiders	: 2-deoxyglucose Glucose Oligomycin	No action shall be taken involving any personal risk or without suitable training. No action shall be taken involving any personal risk or without suitable training. No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media	: 2-deoxyglucose Glucose Oligomycin	Use an extinguishing agent suitable for the surrounding fire. Use an extinguishing agent suitable for the surrounding fire. Use an extinguishing agent suitable for the surrounding fire.
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Section 5. Fire-fighting measures

Unsuitable extinguishing media	: 2-deoxyglucose Glucose Oligomycin	None known. None known. None known.
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5.2 Special hazards arising from the substance or mixture

Specific hazards arising from the chemical	: 2-deoxyglucose Glucose Oligomycin	No specific fire or explosion hazard. No specific fire or explosion hazard. No specific fire or explosion hazard.
Hazardous thermal decomposition products	: 2-deoxyglucose Glucose Oligomycin	Decomposition products may include the following materials: carbon dioxide carbon monoxide Decomposition products may include the following materials: carbon dioxide carbon monoxide Decomposition products may include the following materials: halogenated compounds metal oxide/oxides

5.3 Advice for firefighters

Special protective actions for fire-fighters	: 2-deoxyglucose Glucose Oligomycin	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for fire-fighters	: 2-deoxyglucose Glucose Oligomycin	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	: 2-deoxyglucose Glucose	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment. No action shall be taken involving any personal risk or without suitable training. Evacuate
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Section 6. Accidental release measures

	Oligomycin	surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment. No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
For emergency responders :	2-deoxyglucose	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	Glucose	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	Oligomycin	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
6.2 Environmental precautions	2-deoxyglucose	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
	Glucose	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
	Oligomycin	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
6.3 Methods and materials for containment and cleaning up		
Methods for cleaning up :	2-deoxyglucose	Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.
	Glucose	Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.
	Oligomycin	Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and storage

7.1 Precautions for safe handling

Protective measures	: 2-deoxyglucose	Put on appropriate personal protective equipment (see Section 8).
	Glucose	Put on appropriate personal protective equipment (see Section 8).
	Oligomycin	Put on appropriate personal protective equipment (see Section 8).
Advice on general occupational hygiene	: 2-deoxyglucose	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
	Glucose	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
	Oligomycin	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
7.2 Conditions for safe storage, including any incompatibilities	: 2-deoxyglucose	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
	Glucose	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
	Oligomycin	Storage temperature: room temperature. Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright

Section 7. Handling and storage

to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

7.3 Specific end use(s)

Recommendations	: 2-deoxyglucose Glucose Oligomycin	Industrial applications, Professional applications. Industrial applications, Professional applications. Industrial applications, Professional applications.
Industrial sector specific solutions	: 2-deoxyglucose Glucose Oligomycin	Not available. Not available. Not available.

Section 8. Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
2-deoxyglucose 2-deoxy-D-glucose	None.
Glucose Glucose	None.

Biological exposure indices

No exposure indices known.

8.2 Exposure controls

Appropriate engineering controls	: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
Environmental exposure controls	: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures	: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
Skin protection	
Hand protection	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
Body protection	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Section 8. Exposure controls/personal protection

- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties and safety characteristics

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

Physical state	: 2-deoxyglucose Glucose Oligomycin	Solid. Solid. Solid.
Color	: 2-deoxyglucose Glucose Oligomycin	Not available. Not available. White.
Odor	: 2-deoxyglucose Glucose Oligomycin	Not available. Not available. Odorless.
Odor threshold	: 2-deoxyglucose Glucose Oligomycin	Not available. Not available. Not available.
pH	: 2-deoxyglucose Glucose Oligomycin	Not available. 5.9 Not available.
Melting point/freezing point	: 2-deoxyglucose Glucose Oligomycin	146 to 147°C (294.8 to 296.6°F) 146°C (294.8°F) Not available.
Boiling point, initial boiling point, and boiling range	: 2-deoxyglucose Glucose Oligomycin	Not available. Not available. Not available.
Flash point	: 2-deoxyglucose Glucose Oligomycin	Not applicable. Not applicable. Not applicable.
Evaporation rate	: 2-deoxyglucose Glucose Oligomycin	Not available. Not available. Not available.
Flammability	: 2-deoxyglucose Glucose Oligomycin	Not available. Not available. Not available.
Lower and upper explosion limit/flammability limit	: 2-deoxyglucose Glucose Oligomycin	Not applicable. Not applicable. Not applicable.
Vapor pressure	: 2-deoxyglucose Glucose Oligomycin	Not available. Not available. Not available.
Relative vapor density	: 2-deoxyglucose Glucose Oligomycin	Not applicable. Not applicable. Not applicable.
Relative density	: 2-deoxyglucose Glucose Oligomycin	Not available. 1.56 Not available.

Section 9. Physical and chemical properties and safety characteristics

Solubility(ies)	Media	Result
	2-deoxyglucose water	Soluble
	Glucose water	Soluble
Partition coefficient: n-octanol/water	2-deoxyglucose	Not applicable.
	Glucose	-3.24
	Oligomycin	Not applicable.
Auto-ignition temperature	2-deoxyglucose	Not applicable.
	Glucose	Not applicable.
	Oligomycin	Not applicable.
Decomposition temperature	2-deoxyglucose	Not available.
	Glucose	Not available.
	Oligomycin	Not available.
Viscosity	2-deoxyglucose	Not applicable.
	Glucose	Not applicable.
	Oligomycin	Not applicable.
Particle characteristics		
Median particle size	2-deoxyglucose	Not available.
	Glucose	Not available.
	Oligomycin	Not available.

Section 10. Stability and reactivity

10.1 Reactivity	2-deoxyglucose	No specific test data related to reactivity available for this product or its ingredients.
	Glucose	No specific test data related to reactivity available for this product or its ingredients.
	Oligomycin	No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical stability	2-deoxyglucose	The product is stable.
	Glucose	The product is stable.
	Oligomycin	The product is stable.
10.3 Possibility of hazardous reactions	2-deoxyglucose	Under normal conditions of storage and use, hazardous reactions will not occur.
	Glucose	Under normal conditions of storage and use, hazardous reactions will not occur.
	Oligomycin	Under normal conditions of storage and use, hazardous reactions will not occur.
10.4 Conditions to avoid	2-deoxyglucose	No specific data.
	Glucose	No specific data.
	Oligomycin	No specific data.
10.5 Incompatible materials	2-deoxyglucose	May react or be incompatible with oxidizing materials.
	Glucose	May react or be incompatible with oxidizing materials.
	Oligomycin	May react or be incompatible with oxidizing materials.

Section 10. Stability and reactivity

10.6 Hazardous decomposition products	: 2-deoxyglucose	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	Glucose	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	Oligomycin	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
<input checked="" type="checkbox"/> Glucose Glucose	LD50 Oral	Rat	25800 mg/kg	-

Irritation/Corrosion

Not available.

Sensitization

Not available.

Mutagenicity

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure	: 2-deoxyglucose	Not available.
	Glucose	Not available.
	Oligomycin	Not available.

Potential acute health effects

Eye contact	: 2-deoxyglucose	No known significant effects or critical hazards.
	Glucose	No known significant effects or critical hazards.
	Oligomycin	No known significant effects or critical hazards.
Inhalation	: 2-deoxyglucose	No known significant effects or critical hazards.
	Glucose	No known significant effects or critical hazards.
	Oligomycin	No known significant effects or critical hazards.
Skin contact	: 2-deoxyglucose	No known significant effects or critical hazards.
	Glucose	No known significant effects or critical hazards.
	Oligomycin	No known significant effects or critical hazards.

Section 11. Toxicological information

Ingestion	: 2-deoxyglucose Glucose Oligomycin	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
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Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	: 2-deoxyglucose Glucose Oligomycin	No specific data. No specific data. No specific data.
Inhalation	: 2-deoxyglucose Glucose Oligomycin	No specific data. No specific data. No specific data.
Skin contact	: 2-deoxyglucose Glucose Oligomycin	No specific data. No specific data. No specific data.
Ingestion	: 2-deoxyglucose Glucose Oligomycin	No specific data. No specific data. No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects	: Not available.
Potential delayed effects	: Not available.

Long term exposure

Potential immediate effects	: Not available.
Potential delayed effects	: Not available.

Potential chronic health effects

General	: 2-deoxyglucose Glucose Oligomycin	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
Carcinogenicity	: 2-deoxyglucose Glucose Oligomycin	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
Mutagenicity	: 2-deoxyglucose Glucose Oligomycin	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
Reproductive toxicity	: 2-deoxyglucose Glucose Oligomycin	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
Glucose Glucose	25800	N/A	N/A	N/A	N/A
Oligomycin Oligomycin	110784.0	N/A	N/A	N/A	N/A

Section 11. Toxicological information

Section 12. Ecological information

12.1 Toxicity

Not available.

12.2 Persistence and degradability

Not available.

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Glucose Glucose	-3.24	-	low

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

12.5 Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

13.1 Waste treatment methods

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

The information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

Section 14. Transport information

DOT / TDG / Mexico / IMDG / IATA : Not regulated.

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Section 14. Transport information

Transport in bulk according to IMO instruments : Not available.

Section 15. Regulatory information

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

U.S. Federal regulations : TSCA 8(a) CDR Exempt/Partial exemption: Not determined
Clean Water Act (CWA) 311: Nitric acid, iron(3+) salt, nonahydrate

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Not listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification	: 2-deoxyglucose Glucose Oligomycin	Not applicable. Not applicable. Not applicable.
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Composition/information on ingredients

No products were found.

State regulations

Massachusetts : None of the components are listed.

New York : None of the components are listed.

New Jersey : None of the components are listed.

Pennsylvania : None of the components are listed.

California Prop. 65

This product does not require a Safe Harbor warning under California Prop. 65.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

Section 15. Regulatory information

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Australia	: Not determined.
Canada	: Not determined.
China	: Not determined.
Eurasian Economic Union	: Russian Federation inventory : Not determined.
Japan	: Japan inventory (CSCL) : Not determined. Japan inventory (ISHL) : Not determined.
New Zealand	: Not determined.
Philippines	: Not determined.
Republic of Korea	: Not determined.
Taiwan	: Not determined.
Thailand	: Not determined.
Turkey	: Not determined.
United States	: Not determined.
Viet Nam	: Not determined.

Section 16. Other information

Procedure used to derive the classification

Classification	Justification
Not classified.	

History

Date of issue	: 05/12/2023
Date of previous issue	: 04/26/2021
Version	: 5

Key to abbreviations

: ATE = Acute Toxicity Estimate
: BCF = Bioconcentration Factor
: GHS = Globally Harmonized System of Classification and Labelling of Chemicals
: IATA = International Air Transport Association
: IBC = Intermediate Bulk Container
: IMDG = International Maritime Dangerous Goods
: LogPow = logarithm of the octanol/water partition coefficient
: MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
: N/A = Not available
: UN = United Nations

✔ Indicates information that has changed from previously issued version.

Notice to reader

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