

# SAFETY DATA SHEET

Seahorse XF Glycolysis Stress Test Kit, Part Number 103020-100

## Section 1. Identification

**Product identifier** : Seahorse XF Glycolysis Stress Test Kit, Part Number 103020-100

**Part no. (chemical kit)** : 103020-100

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

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

**Identified uses** :  For research use only.  
 Glucose 6 x 54.048 mg  
 2-deoxyglucose 6 x 246.24 mg  
 Oligomycin 6 x 16.572 mg

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

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

**Emergency telephone number (with hours of operation)** : CHEMTREC®: 1-800-424-9300

## Section 2. Hazard identification

### Classification of the substance or mixture

Glucose

COMBUSTIBLE DUSTS - Category 1

### GHS label elements

**Signal word** :  Glucose Warning  
 2-deoxyglucose No signal word.  
 Oligomycin No signal word.

**Hazard statements** :  Glucose May form combustible dust concentrations in air.  
 2-deoxyglucose No known significant effects or critical hazards.  
 Oligomycin No known significant effects or critical hazards.

### Precautionary statements

**Prevention** :  Glucose Not applicable.  
 2-deoxyglucose Not applicable.  
 Oligomycin Not applicable.

**Response** :  Glucose Not applicable.  
 2-deoxyglucose Not applicable.  
 Oligomycin Not applicable.

**Storage** :  Glucose Not applicable.  
 2-deoxyglucose Not applicable.  
 Oligomycin Not applicable.

**Disposal** :  Glucose Not applicable.  
 2-deoxyglucose Not applicable.  
 Oligomycin Not applicable.

## Section 2. Hazard identification

<b>Supplemental label elements</b>	: <input checked="" type="checkbox"/> Glucose	Keep container tightly closed. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Prevent dust accumulation.
	2-deoxyglucose	None known.
	Oligomycin	None known.
<b>Other hazards which do not result in classification</b>	: <input checked="" type="checkbox"/> Glucose	None known.
	2-deoxyglucose	None known.
	Oligomycin	None known.

## Section 3. Composition/information on ingredients

<b>Substance/mixture</b>	: <input checked="" type="checkbox"/> Glucose	Substance
	2-deoxyglucose	Substance
	Oligomycin	Mixture

Ingredient name	Synonyms	% (w/w)	CAS number
<input checked="" type="checkbox"/> Glucose			
Glucose	Dextrose	100	50-99-7
<b>2-deoxyglucose</b>			
2-deoxy-D-glucose	2-deoxyglucose	100	154-17-6

Ranges if listed above for hazardous ingredient(s) are prescribed ranges. The actual concentration(s) or actual concentration range(s) are being withheld as a trade secret.

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

### Description of necessary first aid measures

<b>Eye contact</b>	: <input checked="" type="checkbox"/> 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.
	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.
	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.
<b>Inhalation</b>	: <input checked="" type="checkbox"/> Glucose	Remove victim to fresh air and keep at rest in a position comfortable for breathing.
	2-deoxyglucose	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.

## Section 4. First-aid measures

<b>Skin contact</b>	: <input checked="" type="checkbox"/> Glucose	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	2-deoxyglucose	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.
<b>Ingestion</b>	: <input checked="" type="checkbox"/> 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.
	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.
	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.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

<b>Eye contact</b>	: <input checked="" type="checkbox"/> Glucose	Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.
	2-deoxyglucose	No known significant effects or critical hazards.
	Oligomycin	No known significant effects or critical hazards.
<b>Inhalation</b>	: <input checked="" type="checkbox"/> Glucose	Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.
	2-deoxyglucose	No known significant effects or critical hazards.
	Oligomycin	No known significant effects or critical hazards.
<b>Skin contact</b>	: <input checked="" type="checkbox"/> Glucose	No known significant effects or critical hazards.
	2-deoxyglucose	No known significant effects or critical hazards.
	Oligomycin	No known significant effects or critical hazards.
<b>Ingestion</b>	: <input checked="" type="checkbox"/> Glucose	No known significant effects or critical hazards.
	2-deoxyglucose	No known significant effects or critical hazards.
	Oligomycin	No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

<b>Eye contact</b>	: <input checked="" type="checkbox"/> Glucose	Adverse symptoms may include the following: irritation redness
	2-deoxyglucose	No specific data.
	Oligomycin	No specific data.
<b>Inhalation</b>	: <input checked="" type="checkbox"/> Glucose	Adverse symptoms may include the following: respiratory tract irritation coughing
	2-deoxyglucose	No specific data.
	Oligomycin	No specific data.
<b>Skin contact</b>	: <input checked="" type="checkbox"/> Glucose	No specific data.
	2-deoxyglucose	No specific data.
	Oligomycin	No specific data.

## Section 4. First-aid measures

<b>Ingestion</b>	: <input checked="" type="checkbox"/> Glucose	No specific data.
	2-deoxyglucose	No specific data.
	Oligomycin	No specific data.

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

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

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

<b>Suitable extinguishing media</b>	: <input checked="" type="checkbox"/> Glucose	Use dry chemical powder.
	2-deoxyglucose	Use an extinguishing agent suitable for the surrounding fire.
	Oligomycin	Use an extinguishing agent suitable for the surrounding fire.
<b>Unsuitable extinguishing media</b>	: <input checked="" type="checkbox"/> Glucose	Avoid high pressure media which could cause the formation of a potentially explosible dust-air mixture.
	2-deoxyglucose	None known.
	Oligomycin	None known.
<b>Specific hazards arising from the chemical</b>	: <input checked="" type="checkbox"/> Glucose	May form explosible dust-air mixture if dispersed.
	2-deoxyglucose	No specific fire or explosion hazard.
	Oligomycin	No specific fire or explosion hazard.
<b>Hazardous thermal decomposition products</b>	: <input checked="" type="checkbox"/> Glucose	Decomposition products may include the following materials: carbon dioxide carbon monoxide
	2-deoxyglucose	Decomposition products may include the following materials: carbon dioxide carbon monoxide
	Oligomycin	Decomposition products may include the following materials: halogenated compounds metal oxide/oxides

## Section 5. Fire-fighting measures

**Special protective actions for fire-fighters** :  Glucose

2-deoxyglucose

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. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

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** :  Glucose

2-deoxyglucose

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

### Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel** :  Glucose

2-deoxyglucose

Oligomycin

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. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing dust. 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.

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** :  Glucose

2-deoxyglucose

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".

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".

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on

## Section 6. Accidental release measures

suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental precautions** :  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).

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).

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).

### Methods and materials for containment and cleaning up

**Methods for cleaning up** :  Glucose

Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

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.

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

### Precautions for safe handling

**Protective measures** :  Glucose

Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing dust. Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Prevent dust accumulation. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Electrical equipment and lighting should be protected to appropriate standards to prevent dust coming into contact with hot surfaces, sparks or other ignition sources. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

2-deoxyglucose

Put on appropriate personal protective equipment (see Section 8).

## Section 7. Handling and storage

<b>Advice on general occupational hygiene</b>	Oligomycin	Put on appropriate personal protective equipment (see Section 8).
	:  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.
	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.
	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.
<b>Conditions for safe storage, including any incompatibilities</b>	:  Glucose	Store in accordance with local regulations. Store in a segregated and approved area. 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. Eliminate all ignition sources. Separate from oxidizing materials. 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.
	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.
	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 to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before

## Section 7. Handling and storage

handling or use.

## Section 8. Exposure controls/personal protection

### Control parameters

### Occupational exposure limits

None.

### Biological exposure indices

No exposure indices known.

- 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.
- 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** :  Glucose Solid.  
2-deoxyglucose Solid.  
Oligomycin Solid.

## Section 9. Physical and chemical properties and safety characteristics

<b>Color</b>	: <input checked="" type="checkbox"/> Glucose <input type="checkbox"/> 2-deoxyglucose <input type="checkbox"/> Oligomycin	Not available. Not available. White.						
<b>Odor</b>	: <input checked="" type="checkbox"/> Glucose <input type="checkbox"/> 2-deoxyglucose <input type="checkbox"/> Oligomycin	Not available. Not available. Odorless.						
<b>Odor threshold</b>	: <input checked="" type="checkbox"/> Glucose <input type="checkbox"/> 2-deoxyglucose <input type="checkbox"/> Oligomycin	Not available. Not available. Not available.						
<b>pH</b>	: <input checked="" type="checkbox"/> Glucose <input type="checkbox"/> 2-deoxyglucose <input type="checkbox"/> Oligomycin	Not available. Not available. Not available.						
<b>Melting point/freezing point</b>	: <input checked="" type="checkbox"/> Glucose <input type="checkbox"/> 2-deoxyglucose <input type="checkbox"/> Oligomycin	146°C (294.8°F) 146 to 147°C (294.8 to 296.6°F) Not available.						
<b>Boiling point, initial boiling point, and boiling range</b>	: <input checked="" type="checkbox"/> Glucose <input type="checkbox"/> 2-deoxyglucose <input type="checkbox"/> Oligomycin	Not available. Not available. Not available.						
<b>Flash point</b>	: <input checked="" type="checkbox"/> Glucose <input type="checkbox"/> 2-deoxyglucose <input type="checkbox"/> Oligomycin	Not applicable. Not applicable. Not applicable.						
<b>Evaporation rate</b>	: <input checked="" type="checkbox"/> Glucose <input type="checkbox"/> 2-deoxyglucose <input type="checkbox"/> Oligomycin	Not available. Not available. Not available.						
<b>Flammability</b>	: <input checked="" type="checkbox"/> Glucose <input type="checkbox"/> 2-deoxyglucose <input type="checkbox"/> Oligomycin	Not available. Not available. Not available.						
<b>Lower and upper explosion limit/flammability limit</b>	: <input checked="" type="checkbox"/> Glucose <input type="checkbox"/> 2-deoxyglucose <input type="checkbox"/> Oligomycin	Not applicable. Not applicable. Not applicable.						
<b>Vapor pressure</b>	: <input type="checkbox"/> Not available.							
<b>Relative vapor density</b>	: <input checked="" type="checkbox"/> Glucose <input type="checkbox"/> 2-deoxyglucose <input type="checkbox"/> Oligomycin	Not applicable. Not applicable. Not applicable.						
<b>Relative density</b>	: <input checked="" type="checkbox"/> Glucose <input type="checkbox"/> 2-deoxyglucose <input type="checkbox"/> Oligomycin	1.56 Not available. Not available.						
<b>Solubility(ies)</b>	: <table border="1"> <thead> <tr> <th>Media</th> <th>Result</th> </tr> </thead> <tbody> <tr> <td><input checked="" type="checkbox"/> Glucose water</td> <td>Soluble</td> </tr> <tr> <td><input type="checkbox"/> 2-deoxyglucose water</td> <td>Soluble</td> </tr> </tbody> </table>	Media	Result	<input checked="" type="checkbox"/> Glucose water	Soluble	<input type="checkbox"/> 2-deoxyglucose water	Soluble	
Media	Result							
<input checked="" type="checkbox"/> Glucose water	Soluble							
<input type="checkbox"/> 2-deoxyglucose water	Soluble							
<b>Partition coefficient: n-octanol/water</b>	: <input checked="" type="checkbox"/> Glucose <input type="checkbox"/> 2-deoxyglucose <input type="checkbox"/> Oligomycin	-3.24 Not available. Not applicable.						
<b>Auto-ignition temperature</b>	: <input checked="" type="checkbox"/> Glucose <input type="checkbox"/> 2-deoxyglucose <input type="checkbox"/> Oligomycin	500°C (932°F) Not applicable. Not applicable.						
<b>Decomposition temperature</b>	: <input checked="" type="checkbox"/> Glucose <input type="checkbox"/> 2-deoxyglucose <input type="checkbox"/> Oligomycin	Not available. Not available. Not available.						
<b>Viscosity</b>	: <input checked="" type="checkbox"/> Glucose <input type="checkbox"/> 2-deoxyglucose <input type="checkbox"/> Oligomycin	Not applicable. Not applicable. Not applicable.						

## Section 9. Physical and chemical properties and safety characteristics

### Particle characteristics

<b>Median particle size</b>	:	Glucose	Not available.
		2-deoxyglucose	Not available.
		Oligomycin	Not available.

## Section 10. Stability and reactivity

<b>Reactivity</b>	:	Glucose	No specific test data related to reactivity available for this product or its ingredients.
		2-deoxyglucose	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.
<b>Chemical stability</b>	:	Glucose	The product is stable.
		2-deoxyglucose	The product is stable.
		Oligomycin	The product is stable.
<b>Possibility of hazardous reactions</b>	:	Glucose	Under normal conditions of storage and use, hazardous reactions will not occur.
		2-deoxyglucose	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.
<b>Conditions to avoid</b>	:	Glucose	Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Prevent dust accumulation.
		2-deoxyglucose	No specific data.
		Oligomycin	No specific data.
<b>Incompatible materials</b>	:	Glucose	Reactive or incompatible with the following materials: oxidizing materials
		2-deoxyglucose	May react or be incompatible with oxidizing materials.
		Oligomycin	May react or be incompatible with oxidizing materials.
<b>Hazardous decomposition products</b>	:	Glucose	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
		2-deoxyglucose	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

### 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** :  Glucose Not available.  
2-deoxyglucose Not available.  
Oligomycin Not available.

#### Potential acute health effects

**Eye contact** :  Glucose Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.  
2-deoxyglucose No known significant effects or critical hazards.  
Oligomycin No known significant effects or critical hazards.

**Inhalation** :  Glucose Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.  
2-deoxyglucose No known significant effects or critical hazards.  
Oligomycin No known significant effects or critical hazards.

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

**Ingestion** :  Glucose No known significant effects or critical hazards.  
2-deoxyglucose No known significant effects or critical hazards.  
Oligomycin No known significant effects or critical hazards.

### Symptoms related to the physical, chemical and toxicological characteristics

## Section 11. Toxicological information

<b>Eye contact</b>	: <input checked="" type="checkbox"/> Glucose 2-deoxyglucose Oligomycin	Adverse symptoms may include the following: irritation redness No specific data. No specific data.
<b>Inhalation</b>	: <input checked="" type="checkbox"/> Glucose 2-deoxyglucose Oligomycin	Adverse symptoms may include the following: respiratory tract irritation coughing No specific data. No specific data.
<b>Skin contact</b>	: <input checked="" type="checkbox"/> Glucose 2-deoxyglucose Oligomycin	No specific data. No specific data. No specific data.
<b>Ingestion</b>	: <input checked="" type="checkbox"/> Glucose 2-deoxyglucose 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

<b>General</b>	: <input checked="" type="checkbox"/> Glucose 2-deoxyglucose Oligomycin	Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Carcinogenicity</b>	: <input checked="" type="checkbox"/> Glucose 2-deoxyglucose Oligomycin	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Mutagenicity</b>	: <input checked="" type="checkbox"/> Glucose 2-deoxyglucose Oligomycin	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Reproductive toxicity</b>	: <input checked="" type="checkbox"/> Glucose 2-deoxyglucose 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)
<input checked="" type="checkbox"/> Glucose Glucose	25800	N/A	N/A	N/A	N/A
<b>Oligomycin</b> Oligomycin	110784.0	N/A	N/A	N/A	N/A

## Section 11. Toxicological information

## Section 12. Ecological information

### Toxicity

Not available.

### Persistence and degradability

Not available.

### Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
Glucose Glucose	-3.24	-	Low

### Mobility in soil

Soil/water partition coefficient (K<sub>oc</sub>) : Not available.

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

## Section 13. Disposal considerations

**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.

## Section 14. Transport information

**TDG / 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.

**Transport in bulk according to IMO instruments** : Not available.

## Section 15. Regulatory information

### Canadian lists

**Canadian NPRI** : None of the components are listed.

**CEPA Toxic substances** : None of the components are listed.

### 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.

#### UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

### Inventory list

**Canada** : Not determined.

**United States** : Not determined.

## Section 16. Other information

### History

**Date of issue/Date of revision** : 04/30/2024

**Date of previous issue** : 04/28/2020

**Version** : 4

### Key to abbreviations

: ATE = Acute Toxicity Estimate  
 BCF = Bioconcentration Factor  
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
 HPR = Hazardous Products Regulations  
 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

### Procedure used to derive the classification

Classification	Justification
 <b>Glucose</b> COMBUSTIBLE DUSTS - Category 1	On basis of test data

 Indicates information that has changed from previously issued version.

### Notice to reader

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