

SAFETY DATA SHEET

Seahorse XF Glycolytic Rate Assay Kit, Part Number 103344-100

Section 1. Identification


Product identifier	: Seahorse XF Glycolytic Rate Assay Kit, Part Number 103344-100
Part no. (chemical kit)	: 103344-100
Part no.	: <input checked="" type="checkbox"/> -deoxyglucose Not available. Antimycin A/ Rotenone Not available.
Material uses	: For research use only. Not for use in diagnostic procedures (RUO). 2-deoxyglucose 6 x 246.24 mg Antimycin A/ Rotenone 6 x 5.725 mg
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

<input checked="" type="checkbox"/> Antimycin A/ Rotenone	AQUATIC HAZARD (ACUTE) - Category 1
H400	AQUATIC HAZARD (LONG-TERM) - Category 1
H410	

GHS label elements

Hazard pictograms	: Antimycin A/ Rotenone	
Signal word	: <input checked="" type="checkbox"/> -deoxyglucose Antimycin A/ Rotenone	No signal word. Warning
Hazard statements	: <input checked="" type="checkbox"/> -deoxyglucose Antimycin A/ Rotenone	No known significant effects or critical hazards. H410 - Very toxic to aquatic life with long lasting effects.
<u>Precautionary statements</u>		
Prevention	: <input checked="" type="checkbox"/> -deoxyglucose Antimycin A/ Rotenone	Not applicable. P273 - Avoid release to the environment.
Response	: <input checked="" type="checkbox"/> -deoxyglucose Antimycin A/ Rotenone	Not applicable. P391 - Collect spillage.
Storage	: <input checked="" type="checkbox"/> -deoxyglucose Antimycin A/ Rotenone	Not applicable. Not applicable.
Disposal	: <input checked="" type="checkbox"/> -deoxyglucose Antimycin A/ Rotenone	Not applicable. P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
Supplemental label elements	: <input checked="" type="checkbox"/> -deoxyglucose Antimycin A/ Rotenone	None known. None known.
Other hazards which do not result in classification	: <input checked="" type="checkbox"/> -deoxyglucose Antimycin A/ Rotenone	None known. None known.

Section 3. Composition/information on ingredients

Substance/mixture : **β**-deoxyglucose
Antimycin A/ Rotenone

Substance
Mixture

Ingredient name	% (w/w)	CAS number
β -deoxyglucose 2-deoxy-D-glucose	80 - 100	154-17-6
Antimycin A/ Rotenone Sodium chloride	1 - 5	7647-14-5
Antimycin A	0.1 - 1	1397-94-0
(2R,6aS,12aS)-1,2,6,6a,12,12a-hexahydro-2-isopropenyl-8,9-dimethoxychromeno[3,4-b]furo[2,3-h]chromen-6-one	0.1 - 1	83-79-4

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment 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

Eye contact	: β -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.
	Antimycin A/ Rotenone	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.
Inhalation	: β -deoxyglucose	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	Antimycin A/ Rotenone	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Skin contact	: β -deoxyglucose	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	Antimycin A/ Rotenone	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	: β -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.
	Antimycin A/ Rotenone	Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to

Section 4. First-aid measures

drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact	: 2-deoxyglucose Antimycin A/ Rotenone	No known significant effects or critical hazards. No known significant effects or critical hazards.
Inhalation	: 2-deoxyglucose Antimycin A/ Rotenone	No known significant effects or critical hazards. No known significant effects or critical hazards.
Skin contact	: 2-deoxyglucose Antimycin A/ Rotenone	No known significant effects or critical hazards. No known significant effects or critical hazards.
Ingestion	: 2-deoxyglucose Antimycin A/ Rotenone	No known significant effects or critical hazards. No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact	: 2-deoxyglucose Antimycin A/ Rotenone	No specific data. No specific data.
Inhalation	: 2-deoxyglucose Antimycin A/ Rotenone	No specific data. No specific data.
Skin contact	: 2-deoxyglucose Antimycin A/ Rotenone	No specific data. No specific data.
Ingestion	: 2-deoxyglucose Antimycin A/ Rotenone	No specific data. No specific data.





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

Notes to physician	: 2-deoxyglucose Antimycin A/ Rotenone	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 Antimycin A/ Rotenone	No specific treatment. No specific treatment.
Protection of first-aiders	: 2-deoxyglucose Antimycin A/ Rotenone	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. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)


Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media	:  -deoxyglucose Antimycin A/ Rotenone	Use an extinguishing agent suitable for the surrounding fire. Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	:  -deoxyglucose Antimycin A/ Rotenone	None known. None known.
Specific hazards arising from the chemical	:  -deoxyglucose Antimycin A/ Rotenone	No specific fire or explosion hazard. This material is very toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Hazardous thermal decomposition products	:  -deoxyglucose Antimycin A/ Rotenone	Decomposition products may include the following materials: carbon dioxide carbon monoxide Decomposition products may include the following materials: halogenated compounds metal oxide/oxides
Special protective actions for fire-fighters	:  -deoxyglucose Antimycin A/ Rotenone	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	:  -deoxyglucose Antimycin A/ Rotenone	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	:  -deoxyglucose Antimycin A/ Rotenone	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. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
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Section 6. Accidental release measures

For emergency responders : -deoxyglucose

Antimycin A/ Rotenone

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".

Environmental precautions : -deoxyglucose

Antimycin A/ Rotenone

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).

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). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

Methods and materials for containment and cleaning up

Methods for cleaning up : -deoxyglucose

Antimycin A/ Rotenone

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.

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 : -deoxyglucose

Antimycin A/ Rotenone

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

Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid release to the environment. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene : -deoxyglucose

Antimycin A/ Rotenone

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.

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.

Section 7. Handling and storage

Conditions for safe storage, including any incompatibilities : -deoxyglucose

Antimycin A/ Rotenone


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.

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 handling or use.

Section 8. Exposure controls/personal protection

[Control parameters](#)

[Occupational exposure limits](#)

Ingredient name	Exposure limits
<p> Antimycin A/ Rotenone (2R,6aS,12aS)-1,2,6,6a,12,12a-hexahydro-2-isopropenyl-8,9-dimethoxychromeno[3,4-b]furo[2,3-h]chromen-6-one</p>	<p>CA Alberta Provincial (Canada, 6/2018). 8 hrs OEL: 5 mg/m³ 8 hours.</p> <p>CA British Columbia Provincial (Canada, 1/2021). TWA: 5 mg/m³ 8 hours.</p> <p>CA Ontario Provincial (Canada, 6/2019). TWA: 5 mg/m³ 8 hours.</p> <p>CA Quebec Provincial (Canada, 7/2019). TWAEV: 5 mg/m³ 8 hours.</p> <p>CA Saskatchewan Provincial (Canada, 7/2013). STEL: 10 mg/m³ 15 minutes. TWA: 5 mg/m³ 8 hours.</p>

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](#)

Section 8. Exposure controls/personal protection

- 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. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- 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	: <input checked="" type="checkbox"/> -deoxyglucose	Solid.
	Antimycin A/ Rotenone	Solid.
Color	: <input checked="" type="checkbox"/> -deoxyglucose	Not available.
	Antimycin A/ Rotenone	White.
Odor	: <input checked="" type="checkbox"/> -deoxyglucose	Not available.
	Antimycin A/ Rotenone	Odorless.
Odor threshold	: <input checked="" type="checkbox"/> -deoxyglucose	Not available.
	Antimycin A/ Rotenone	Not available.
pH	: <input checked="" type="checkbox"/> -deoxyglucose	Not available.
	Antimycin A/ Rotenone	Not available.
Melting point/freezing point	: <input checked="" type="checkbox"/> -deoxyglucose	146 to 147°C (294.8 to 296.6°F)
	Antimycin A/ Rotenone	Not available.
Boiling point, initial boiling point, and boiling range	: <input checked="" type="checkbox"/> -deoxyglucose	Not available.
	Antimycin A/ Rotenone	Not available.
Flash point	: <input checked="" type="checkbox"/> -deoxyglucose	Not applicable.
	Antimycin A/ Rotenone	Not applicable.
Evaporation rate	: <input checked="" type="checkbox"/> -deoxyglucose	Not available.
	Antimycin A/ Rotenone	Not available.

Section 9. Physical and chemical properties and safety characteristics

Flammability	: <input checked="" type="checkbox"/> -deoxyglucose Antimycin A/ Rotenone	Not available. Not available.
Lower and upper explosion limit/flammability limit	: <input checked="" type="checkbox"/> -deoxyglucose Antimycin A/ Rotenone	Not applicable. Not applicable.
Vapor pressure	: <input checked="" type="checkbox"/> -deoxyglucose Antimycin A/ Rotenone	Not available. Not available.
Relative vapor density	: <input checked="" type="checkbox"/> -deoxyglucose Antimycin A/ Rotenone	Not applicable. Not applicable.
Relative density	: <input checked="" type="checkbox"/> -deoxyglucose Antimycin A/ Rotenone	Not available. Not available.
Solubility	: <input checked="" type="checkbox"/> -deoxyglucose Antimycin A/ Rotenone	Soluble in the following materials: cold water and hot water. Not available.
Partition coefficient: n-octanol/water	: <input checked="" type="checkbox"/> -deoxyglucose Antimycin A/ Rotenone	Not applicable. Not applicable.
Auto-ignition temperature	: <input checked="" type="checkbox"/> -deoxyglucose Antimycin A/ Rotenone	Not applicable. Not applicable.
Decomposition temperature	: <input checked="" type="checkbox"/> -deoxyglucose Antimycin A/ Rotenone	Not available. Not available.
Viscosity	: <input checked="" type="checkbox"/> -deoxyglucose Antimycin A/ Rotenone	Not applicable. Not applicable.
Particle characteristics		
Median particle size	: <input checked="" type="checkbox"/> -deoxyglucose Antimycin A/ Rotenone	Not available. Not available.

Section 10. Stability and reactivity

Reactivity	: <input checked="" type="checkbox"/> -deoxyglucose Antimycin A/ Rotenone	No specific test data related to reactivity available for this product or its ingredients. No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: <input checked="" type="checkbox"/> -deoxyglucose Antimycin A/ Rotenone	The product is stable. The product is stable.
Possibility of hazardous reactions	: <input checked="" type="checkbox"/> -deoxyglucose Antimycin A/ Rotenone	Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: <input checked="" type="checkbox"/> -deoxyglucose Antimycin A/ Rotenone	No specific data. No specific data.
Incompatible materials	: <input checked="" type="checkbox"/> -deoxyglucose Antimycin A/ Rotenone	May react or be incompatible with oxidizing materials. May react or be incompatible with oxidizing materials.
Hazardous decomposition products	: <input checked="" type="checkbox"/> -deoxyglucose Antimycin A/ Rotenone	Under normal conditions of storage and use, hazardous decomposition products should not be produced. 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
Antimycin A/ Rotenone Sodium chloride	LD50 Oral	Rat	3000 mg/kg	-
Antimycin A	LD50 Oral	Rat	28 mg/kg	-
(2R,6aS,12aS)-1,2,6,6a,12,12a-hexahydro-2-isopropenyl-8,9-dimethoxychromeno[3,4-b]furo[2,3-h]chromen-6-one	LD50 Oral	Rat	25 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Antimycin A/ Rotenone Sodium chloride	Eyes - Moderate irritant	Rabbit	-	24 hours 100 mg	-
	Eyes - Moderate irritant	Rabbit	-	10 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-
(2R,6aS,12aS)-1,2,6,6a,12,12a-hexahydro-2-isopropenyl-8,9-dimethoxychromeno[3,4-b]furo[2,3-h]chromen-6-one	Eyes - Mild irritant	Rabbit	-	1 %	-

Sensitization

Not available.

Mutagenicity

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Classification

Product/ingredient name	IARC	NTP	ACGIH
Antimycin A/ Rotenone (2R,6aS,12aS)-1,2,6,6a,12,12a-hexahydro-2-isopropenyl-8,9-dimethoxychromeno[3,4-b]furo[2,3-h]chromen-6-one	-	-	A4

Reproductive toxicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Antimycin A/ Rotenone (2R,6aS,12aS)-1,2,6,6a,12,12a-hexahydro-2-isopropenyl-8,9-dimethoxychromeno[3,4-b]furo[2,3-h]chromen-6-one	Category 3 Category 3	-	Respiratory tract irritation Narcotic effects

Specific target organ toxicity (repeated exposure)

Section 11. Toxicological information

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure : -deoxyglucose Not available.
Antimycin A/ Rotenone Not available.

Potential acute health effects

Eye contact : -deoxyglucose No known significant effects or critical hazards.
Antimycin A/ Rotenone No known significant effects or critical hazards.

Inhalation : -deoxyglucose No known significant effects or critical hazards.
Antimycin A/ Rotenone No known significant effects or critical hazards.

Skin contact : -deoxyglucose No known significant effects or critical hazards.
Antimycin A/ Rotenone No known significant effects or critical hazards.

Ingestion : -deoxyglucose No known significant effects or critical hazards.
Antimycin A/ Rotenone No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : -deoxyglucose No specific data.
Antimycin A/ Rotenone No specific data.

Inhalation : -deoxyglucose No specific data.
Antimycin A/ Rotenone No specific data.

Skin contact : -deoxyglucose No specific data.
Antimycin A/ Rotenone No specific data.

Ingestion : -deoxyglucose No specific data.
Antimycin A/ Rotenone 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 : -deoxyglucose No known significant effects or critical hazards.
Antimycin A/ Rotenone No known significant effects or critical hazards.

Carcinogenicity : -deoxyglucose No known significant effects or critical hazards.
Antimycin A/ Rotenone No known significant effects or critical hazards.

Mutagenicity : -deoxyglucose No known significant effects or critical hazards.
Antimycin A/ Rotenone No known significant effects or critical hazards.

Reproductive toxicity : -deoxyglucose No known significant effects or critical hazards.
Antimycin A/ Rotenone No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Section 11. Toxicological information

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
Antimycin A/ Rotenone					
Antimycin A/ Rotenone	110285.4	N/A	N/A	N/A	N/A
Sodium chloride	3000	N/A	N/A	N/A	N/A
Antimycin A	28	N/A	N/A	N/A	N/A
(2R,6aS,12aS)-1,2,6,6a,12,12a-hexahydro-2-isopropenyl-8,9-dimethoxychromeno[3,4-b]furo[2,3-h]chromen-6-one	25	N/A	N/A	N/A	N/A

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Antimycin A/ Rotenone			
Sodium chloride	Acute EC50 2430000 µg/l Fresh water	Algae - Navicula seminulum	96 hours
	Acute EC50 519.6 mg/l Fresh water	Crustaceans - Cypris subglobosa	48 hours
	Acute EC50 402.6 mg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute IC50 6.87 g/L Fresh water	Aquatic plants - Lemna minor	96 hours
	Acute LC50 1000000 µg/l Fresh water	Fish - Morone saxatilis - Larvae	96 hours
	Chronic LC10 781 mg/l Fresh water	Crustaceans - Hyalella azteca - Juvenile (Fledgling, Hatchling, Weanling)	3 weeks
	Chronic NOEC 6 g/L Fresh water	Aquatic plants - Lemna minor	96 hours
	Chronic NOEC 0.314 g/L Fresh water	Daphnia - Daphnia pulex	21 days
	Chronic NOEC 100 mg/l Fresh water	Fish - Gambusia holbrooki - Adult	8 weeks
Antimycin A	Acute EC50 0.024 ppm Marine water	Crustaceans - Penaeus duorarum	48 hours
	Acute LC50 0.000019 mg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
(2R,6aS,12aS)-1,2,6,6a,12,12a-hexahydro-2-isopropenyl-8,9-dimethoxychromeno[3,4-b]furo[2,3-h]chromen-6-one	Acute EC50 190 µg/l Fresh water	Crustaceans - Simocephalus serrulatus - Larvae	48 hours
	Acute EC50 3.7 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 1.9 ppb Fresh water	Fish - Oncorhynchus mykiss	96 hours
	Chronic NOEC 0.3 ppb Fresh water	Daphnia - Daphnia magna	21 days
	Chronic NOEC 1.01 ppb	Fish - Oncorhynchus mykiss	32 days

Persistence and degradability

Not available.

Bioaccumulative potential

Section 12. Ecological information

Product/ingredient name	LogP _{ow}	BCF	Potential
Antimycin A/ Rotenone (2R,6aS,12aS)-1,2,6,6a, 12,12a-hexahydro- 2-isopropenyl- 8,9-dimethoxychromeno [3,4-b]furo[2,3-h]chromen- 6-one	4.1	25.7	low

Mobility in soil

Soil/water partition coefficient (K_{oc}) : 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. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. 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.

Additional information

Remarks: De minimis quantities

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.

Section 15. Regulatory information

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

Australia	: Not determined.
Canada	: Not determined.
China	: Not determined.
Europe	: 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

History

Date of issue/Date of revision : 04/21/2022

Date of previous issue : 05/24/2018

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
Antimycin A/ Rotenone AQUATIC HAZARD (ACUTE) - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 1	Calculation method Calculation method

References : Not available.

 Indicates information that has changed from previously issued version.

Notice to reader

Section 16. Other information

Disclaimer: The information contained in this document is based on Agilent's state of knowledge at the time of preparation. No warranty as to its accurateness, completeness or suitability for a particular purpose is expressed or implied.