

# SAFETY DATA SHEET

## Seahorse XF T Cell Metabolic Profiling Kit

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

#### 1.1 Product identifier

<b>Product name</b>	: Seahorse XF T Cell Metabolic Profiling Kit		
<b>Part no. (chemical kit)</b>	: 103772-100		
<b>Part no.</b>	: XF oligomycin A	Not available.	
	: XF Bam15	Not available.	
	: XF Rot/AA	Not available.	

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

<b>Identified uses</b>	: For research use only.		
	: XF oligomycin A	6 x 13.548 mg	
	: XF Bam15	6 x 115.705 mg	
	: XF Rot/AA	6 x 11.588 mg	
<b>Uses advised against</b>	: Not for use in diagnostic procedures (RUO).		

#### 1.3 Details of the supplier of the safety data sheet

Agilent Technologies Deutschland GmbH  
Hewlett-Packard-Str. 8  
76337 Waldbronn  
Germany  
0800 603 1000  
**e-mail address of person responsible for this SDS** : pdl-msds\_author@agilent.com

#### 1.4 Emergency telephone number

**Emergency telephone number (with hours of operation)** : CHEMTREC®: +(44)-870-8200418

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

<b>Product definition</b>	: XF oligomycin A	Mixture
	: XF Bam15	Mixture
	: XF Rot/AA	Mixture

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

##### **XF Rot/AA**

H400	SHORT-TERM (ACUTE) AQUATIC HAZARD	Category 1
H410	LONG-TERM (CHRONIC) AQUATIC HAZARD	Category 1

XF oligomycin A The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.

XF Bam15 The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.

XF Rot/AA The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

<b>Ingredients of unknown toxicity</b>	: XF oligomycin A	Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 1 - 10%
	: XF Bam15	Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 1 - 10%
	: XF Rot/AA	Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 1 - 10%

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

## SECTION 2: Hazards identification

### 2.2 Label elements

**Hazard pictograms** : XF Rot/AA



**Signal word** : XF oligomycin A  
XF Bam15  
XF Rot/AA

No signal word.  
No signal word.  
Warning

**Hazard statements** : XF oligomycin A  
XF Bam15  
XF Rot/AA

No known significant effects or critical hazards.  
No known significant effects or critical hazards.  
H410 - Very toxic to aquatic life with long lasting effects.

#### Precautionary statements

**Prevention** : XF oligomycin A  
XF Bam15  
XF Rot/AA

Not applicable.  
Not applicable.  
P273 - Avoid release to the environment.

**Response** : XF oligomycin A  
XF Bam15  
XF Rot/AA

Not applicable.  
Not applicable.  
P391 - Collect spillage.

**Storage** : XF oligomycin A  
XF Bam15  
XF Rot/AA

Not applicable.  
Not applicable.  
Not applicable.

**Disposal** : XF oligomycin A  
XF Bam15  
XF Rot/AA

Not applicable.  
Not applicable.  
P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Supplemental label elements** : XF oligomycin A  
XF Bam15  
XF Rot/AA

Not applicable.  
Not applicable.  
Not applicable.

**Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles** : XF oligomycin A  
XF Bam15  
XF Rot/AA

Not applicable.  
Not applicable.  
Not applicable.

#### Special packaging requirements

**Tactile warning of danger** : XF oligomycin A  
XF Bam15  
XF Rot/AA

Not applicable.  
Not applicable.  
Not applicable.

### 2.3 Other hazards

**Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII** : XF oligomycin A  
XF Bam15  
XF Rot/AA

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.  
This mixture does not contain any substances that are assessed to be a PBT or a vPvB.  
This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

**Other hazards which do not result in classification** : XF oligomycin A  
XF Bam15  
XF Rot/AA

None known.  
None known.  
None known.

Seahorse XF T Cell Metabolic Profiling Kit

**SECTION 3: Composition/information on ingredients**

**3.1 Substances** : XF oligomycin A Mixture  
 XF Bam15 Mixture  
 XF Rot/AA Mixture

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Type
<b>XF Rot/AA</b> Antimycin A	CAS: 1397-94-0	≤0.3	Acute Tox. 2, H300 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	ATE [Oral] = 28 mg/kg M [Acute] = 10000 M [Chronic] = 10000	[1]
(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	EC: 201-501-9 CAS: 83-79-4 Index: 650-005-00-2	<0.1	Acute Tox. 3, H301 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 <b>See Section 16 for the full text of the H statements declared above.</b>	ATE [Oral] = 100 mg/kg M [Acute] = 100 M [Chronic] = 100	[1] [2]

There are no additional ingredients present which, within the current knowledge of the supplier, are classified and contribute to the classification of the substance and hence require reporting in this section.

Type  
 XF Rot/AA [1] Substance classified with a health or environmental hazard  
 [2] Substance with a workplace exposure limit

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

**SECTION 4: First aid measures**

**4.1 Description of first aid measures**

**Eye contact** : XF oligomycin A 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.  
 XF Bam15 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.  
 XF Rot/AA 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** : XF oligomycin A Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.  
 XF Bam15 Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.  
 XF Rot/AA Remove victim to fresh air and keep at rest in a position comfortable for breathing.

**Skin contact** : XF oligomycin A Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.  
 XF Bam15 Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.  
 XF Rot/AA Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

**SECTION 4: First aid measures**

<b>Ingestion</b>	: XF oligomycin A	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.
	XF Bam15	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.
	XF Rot/AA	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.
<b>Protection of first-aiders</b>	: XF oligomycin A	No action shall be taken involving any personal risk or without suitable training.
	XF Bam15	No action shall be taken involving any personal risk or without suitable training.
	XF Rot/AA	No action shall be taken involving any personal risk or without suitable training.

**4.2 Most important symptoms and effects, both acute and delayed**

Potential acute health effects

<b>Eye contact</b>	: XF oligomycin A XF Bam15 XF Rot/AA	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Inhalation</b>	: XF oligomycin A XF Bam15 XF Rot/AA	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Skin contact</b>	: XF oligomycin A XF Bam15 XF Rot/AA	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Ingestion</b>	: XF oligomycin A XF Bam15 XF Rot/AA	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

<b>Eye contact</b>	: XF oligomycin A XF Bam15 XF Rot/AA	No specific data. No specific data. No specific data.
<b>Inhalation</b>	: XF oligomycin A XF Bam15 XF Rot/AA	No specific data. No specific data. No specific data.
<b>Skin contact</b>	: XF oligomycin A XF Bam15 XF Rot/AA	No specific data. No specific data. No specific data.
<b>Ingestion</b>	: XF oligomycin A XF Bam15 XF Rot/AA	No specific data. No specific data. No specific data.

**4.3 Indication of any immediate medical attention and special treatment needed**

<b>Notes to physician</b>	: XF oligomycin A	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	XF Bam15	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	XF Rot/AA	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
<b>Specific treatments</b>	: XF oligomycin A	No specific treatment.
	XF Bam15	No specific treatment.
	XF Rot/AA	No specific treatment.

**SECTION 5: Firefighting measures****5.1 Extinguishing media**

<b>Suitable extinguishing media</b>	: XF oligomycin A	Use an extinguishing agent suitable for the surrounding fire.
	XF Bam15	Use an extinguishing agent suitable for the surrounding fire.
	XF Rot/AA	Use an extinguishing agent suitable for the surrounding fire.
<b>Unsuitable extinguishing media</b>	: XF oligomycin A	None known.
	XF Bam15	None known.
	XF Rot/AA	None known.

**5.2 Special hazards arising from the substance or mixture**

<b>Hazards from the substance or mixture</b>	: XF oligomycin A	No specific fire or explosion hazard.
	XF Bam15	No specific fire or explosion hazard.
	XF Rot/AA	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.
<b>Hazardous combustion products</b>	: XF oligomycin A	Decomposition products may include the following materials: halogenated compounds metal oxide/oxides
	XF Bam15	Decomposition products may include the following materials: halogenated compounds metal oxide/oxides
	XF Rot/AA	Decomposition products may include the following materials: halogenated compounds metal oxide/oxides

**5.3 Advice for firefighters**

<b>Special precautions for fire-fighters</b>	: XF oligomycin A	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.
	XF Bam15	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.
	XF Rot/AA	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.
<b>Special protective equipment for fire-fighters</b>	: XF oligomycin A	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
	XF Bam15	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
	XF Rot/AA	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

<b>For non-emergency personnel</b>	: XF oligomycin A	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 spilt material. Put on appropriate personal protective equipment.
	XF Bam15	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 spilt material. Put on appropriate personal protective equipment.
	XF Rot/AA	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 spilt material. Put on appropriate personal protective equipment.
<b>For emergency responders</b>	: XF oligomycin A	If specialised 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".
	XF Bam15	If specialised 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".
	XF Rot/AA	If specialised 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

: XF oligomycin A	Avoid dispersal of spilt 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).
XF Bam15	Avoid dispersal of spilt 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).
XF Rot/AA	Avoid dispersal of spilt 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.

### 6.3 Methods and material for containment and cleaning up

<b>Methods for cleaning up</b>	: XF oligomycin A	Move containers from spill area. Vacuum or sweep up material and place in a designated, labelled waste container. Dispose of via a licensed waste disposal contractor.
	XF Bam15	Move containers from spill area. Vacuum or sweep up material and place in a designated, labelled waste container. Dispose of via a licensed waste disposal contractor.
	XF Rot/AA	Move containers from spill area. Vacuum or sweep up material and place in a designated, labelled waste container. Dispose of via a licensed waste disposal contractor.

### 6.4 Reference to other sections

: See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information.
---

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

<b>Protective measures</b>	: XF oligomycin A	Put on appropriate personal protective equipment (see Section 8).
	XF Bam15	Put on appropriate personal protective equipment (see Section 8).
	XF Rot/AA	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.
<b>Advice on general occupational hygiene</b>	: XF oligomycin A	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.
	XF Bam15	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.
	XF Rot/AA	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

<b>Storage</b>	: XF oligomycin A	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 unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
	XF Bam15	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 unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
	XF Rot/AA	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 unlabelled containers. Use

**Seahorse XF T Cell Metabolic Profiling Kit**

**SECTION 7: Handling and storage**

appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

**Seveso Directive - Reporting thresholds**

**Danger criteria**

Category	Notification and MAPP threshold	Safety report threshold
XF Rot/AA E1	100 tonne	200 tonne

**7.3 Specific end use(s)**

<b>Recommendations</b>	: XF oligomycin A XF Bam15 XF Rot/AA	Industrial applications, Professional applications. Industrial applications, Professional applications. Industrial applications, Professional applications.
<b>Industrial sector specific solutions</b>	: XF oligomycin A XF Bam15 XF Rot/AA	Not available. Not available. Not available.

**SECTION 8: Exposure controls/personal protection**

**8.1 Control parameters**

**Occupational exposure limits**

Product/ingredient name	Exposure limit values
XF Rot/AA (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	<b>NAOSH (Ireland, 5/2021). Notes: Advisory Occupational Exposure Limit Values (OELVs)</b> OELV: 5 mg/m <sup>3</sup> 8 hours.

**Biological exposure indices**

No exposure indices known.

<b>Recommended monitoring procedures</b>	: Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
--	---

**DNELs/DMELs**

No DNELs/DMELs available.

**PNECs**

No PNECs available

**8.2 Exposure controls**

<b>Appropriate engineering controls</b>	: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
---	--

**Individual protection measures**

<b>Hygiene measures</b>	: 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.
-------------------------	---

**SECTION 8: Exposure controls/personal protection**

- 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.
- 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.

**SECTION 9: Physical and chemical properties**

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

**9.1 Information on basic physical and chemical properties****Appearance**

<b>Physical state</b>	: XF oligomycin A XF Bam15 XF Rot/AA	Solid. Solid. Solid.
<b>Colour</b>	: XF oligomycin A XF Bam15 XF Rot/AA	Not available. Not available. Not available.
<b>Odour</b>	: XF oligomycin A XF Bam15 XF Rot/AA	Not available. Not available. Not available.
<b>Odour threshold</b>	: XF oligomycin A XF Bam15 XF Rot/AA	Not available. Not available. Not available.
<b>Melting point/freezing point</b>	: XF oligomycin A XF Bam15 XF Rot/AA	Not available. Not available. Not available.
<b>Initial boiling point and boiling range</b>	: XF oligomycin A XF Bam15 XF Rot/AA	Not available. Not available. Not available.
<b>Flammability</b>	: XF oligomycin A XF Bam15 XF Rot/AA	Not available. Not available. Not available.
<b>Upper/lower flammability or explosive limits</b>	: XF oligomycin A XF Bam15 XF Rot/AA	Not applicable. Not applicable. Not applicable.

## Seahorse XF T Cell Metabolic Profiling Kit

**SECTION 9: Physical and chemical properties**

<b>Flash point</b>	: XF oligomycin A XF Bam15 XF Rot/AA	Not applicable. Not applicable. Not applicable.
<b>Auto-ignition temperature</b>	: XF oligomycin A XF Bam15 XF Rot/AA	Not applicable. Not applicable. Not applicable.
<b>Decomposition temperature</b>	: XF oligomycin A XF Bam15 XF Rot/AA	Not available. Not available. Not available.
<b>pH</b>	: XF oligomycin A XF Bam15 XF Rot/AA	Not available. Not available. Not available.
<b>Viscosity</b>	: XF oligomycin A XF Bam15 XF Rot/AA	Not applicable. Not applicable. Not applicable.
<b>Solubility(ies)</b>	: Not available.	
<b>Partition coefficient: n-octanol/water</b>	: XF oligomycin A XF Bam15 XF Rot/AA	Not applicable. Not applicable. Not applicable.
<b>Vapour pressure</b>	: Not available.	
<b>Evaporation rate</b>	: XF oligomycin A XF Bam15 XF Rot/AA	Not available. Not available. Not available.
<b>Relative density</b>	: XF oligomycin A XF Bam15 XF Rot/AA	Not available. Not available. Not available.
<b>Vapour density</b>	: XF oligomycin A XF Bam15 XF Rot/AA	Not applicable. Not applicable. Not applicable.
<b>Explosive properties</b>	: XF oligomycin A XF Bam15 XF Rot/AA	Not available. Not available. Not available.
<b>Oxidising properties</b>	: XF oligomycin A XF Bam15 XF Rot/AA	Not available. Not available. Not available.
<b><u>Particle characteristics</u></b>		
<b>Median particle size</b>	: XF oligomycin A XF Bam15 XF Rot/AA	Not available. Not available. Not available.

**9.2 Other information**

No additional information.

**SECTION 10: Stability and reactivity**

<b>10.1 Reactivity</b>	: XF oligomycin A  XF Bam15  XF Rot/AA	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. No specific test data related to reactivity available for this product or its ingredients.
<b>10.2 Chemical stability</b>	: XF oligomycin A XF Bam15 XF Rot/AA	The product is stable. The product is stable. The product is stable.

Seahorse XF T Cell Metabolic Profiling Kit

**SECTION 10: Stability and reactivity**

<b>10.3 Possibility of hazardous reactions</b>	: XF oligomycin A	Under normal conditions of storage and use, hazardous reactions will not occur.
	XF Bam15	Under normal conditions of storage and use, hazardous reactions will not occur.
	XF Rot/AA	Under normal conditions of storage and use, hazardous reactions will not occur.
<b>10.4 Conditions to avoid</b>	: XF oligomycin A	No specific data.
	XF Bam15	No specific data.
	XF Rot/AA	No specific data.
<b>10.5 Incompatible materials</b>	: XF oligomycin A	May react or be incompatible with oxidising materials.
	XF Bam15	May react or be incompatible with oxidising materials.
	XF Rot/AA	May react or be incompatible with oxidising materials.
<b>10.6 Hazardous decomposition products</b>	: XF oligomycin A	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	XF Bam15	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	XF Rot/AA	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
<b>XF Rot/AA</b> Antimycin 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	LD50 Oral	Rat	28 mg/kg	-
	LD50 Oral	Rat	25 mg/kg	-

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
<b>XF Rot/AA</b> XF Rot/AA Antimycin 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	26883.0 28 100	N/A N/A N/A	N/A N/A N/A	N/A N/A N/A	N/A N/A N/A

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
<b>XF Rot/AA</b> (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 %	-

Sensitiser

**Conclusion/Summary** : Not available.

**SECTION 11: Toxicological information**

**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)**

Product/ingredient name	Category	Route of exposure	Target organs
<b>XF Rot/AA</b> (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	-	Respiratory tract irritation

**Specific target organ toxicity (repeated exposure)**

Not available.

**Aspiration hazard**

Not available.

**Information on likely routes of exposure** : XF oligomycin A Not available.  
 XF Bam15 Not available.  
 XF Rot/AA Not available.

**Potential acute health effects**

**Inhalation** : XF oligomycin A No known significant effects or critical hazards.  
 XF Bam15 No known significant effects or critical hazards.  
 XF Rot/AA No known significant effects or critical hazards.

**Ingestion** : XF oligomycin A No known significant effects or critical hazards.  
 XF Bam15 No known significant effects or critical hazards.  
 XF Rot/AA No known significant effects or critical hazards.

**Skin contact** : XF oligomycin A No known significant effects or critical hazards.  
 XF Bam15 No known significant effects or critical hazards.  
 XF Rot/AA No known significant effects or critical hazards.

**Eye contact** : XF oligomycin A No known significant effects or critical hazards.  
 XF Bam15 No known significant effects or critical hazards.  
 XF Rot/AA No known significant effects or critical hazards.

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

**Inhalation** : XF oligomycin A No specific data.  
 XF Bam15 No specific data.  
 XF Rot/AA No specific data.

**Ingestion** : XF oligomycin A No specific data.  
 XF Bam15 No specific data.  
 XF Rot/AA No specific data.

**Skin contact** : XF oligomycin A No specific data.  
 XF Bam15 No specific data.  
 XF Rot/AA No specific data.

**Eye contact** : XF oligomycin A No specific data.  
 XF Bam15 No specific data.  
 XF Rot/AA No specific data.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Short term exposure**

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

Seahorse XF T Cell Metabolic Profiling Kit

**SECTION 11: Toxicological information**

Long term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

Potential chronic health effects

**Conclusion/Summary** : Not available.

<b>General</b>	: XF oligomycin A XF Bam15 XF Rot/AA	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Carcinogenicity</b>	: XF oligomycin A XF Bam15 XF Rot/AA	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Mutagenicity</b>	: XF oligomycin A XF Bam15 XF Rot/AA	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>	: XF oligomycin A XF Bam15 XF Rot/AA	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.

**11.2 Information on other hazards**

**11.2.1 Endocrine disrupting properties**

Not available.

**11.2.2 Other information**

Not available.

**SECTION 12: Ecological information**

**12.1 Toxicity**

Product/ingredient name	Result	Species	Exposure
<b>XF Rot/AA</b> Antimycin 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	Acute LC50 0.000019 mg/l Fresh water	Fish - <i>Oncorhynchus mykiss</i>	96 hours
	Acute EC50 190 µg/l Fresh water	Crustaceans - <i>Simocephalus serrulatus</i> - Larvae	48 hours
	Acute EC50 3.7 µg/l Fresh water	Daphnia - <i>Daphnia magna</i>	48 hours
	Acute LC50 1.9 ppb Fresh water	Fish - <i>Oncorhynchus mykiss</i>	96 hours
	Chronic NOEC 0.3 ppb Fresh water	Daphnia - <i>Daphnia magna</i>	21 days
Chronic NOEC 1.01 ppb	Fish - <i>Oncorhynchus mykiss</i>	32 days	

**12.2 Persistence and degradability**

Not available.

**12.3 Bioaccumulative potential**

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
<b>XF Rot/AA</b> (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

**Seahorse XF T Cell Metabolic Profiling Kit**

**SECTION 12: Ecological information**

**12.4 Mobility in soil**

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

**12.5 Results of PBT and vPvB assessment**

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

**12.6 Endocrine disrupting properties**

Not available.

**12.7 Other adverse effects**

No known significant effects or critical hazards.

**SECTION 13: Disposal considerations**

**13.1 Waste treatment methods**

Product

**Methods of disposal** : The generation of waste should be avoided or minimised 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.

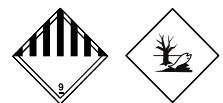
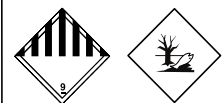

**Hazardous waste** : The classification of the product may meet the criteria for a hazardous waste.

Packaging

**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

**Special precautions** : 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 spill material and runoff and contact with soil, waterways, drains and sewers.

**SECTION 14: Transport information**

	<b>ADR/RID</b>	<b>IMDG</b>	<b>IATA</b>
<b>14.1 UN number or ID number</b>	UN3077	UN3077	UN3077
<b>14.2 UN proper shipping name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Antimycin A)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Antimycin A)	Environmentally hazardous substance, solid, n.o.s. (Antimycin A)
<b>14.3 Transport hazard class(es)</b>	9 	9 	9 
<b>14.4 Packing group</b>	III	III	III
<b>14.5 Environmental hazards</b>	Yes.	Yes.	Yes.

Additional information

Seahorse XF T Cell Metabolic Profiling Kit

**SECTION 14: Transport information**

Remarks: De minimis quantities

- ADR/RID** : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.  
**Hazard identification number** 90  
**Limited quantity** 5 kg  
**Special provisions** 274, 335, 601, 375  
**Tunnel code** (-)
- IMDG** : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.  
**Emergency schedules** F-A, S-F  
**Special provisions** 274, 335, 966, 967, 969
- IATA** : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.  
**Quantity limitation** Passenger and Cargo Aircraft: 400 kg. Packaging instructions: 956. Cargo Aircraft Only: 400 kg. Packaging instructions: 956. Limited Quantities - Passenger Aircraft: 30 kg. Packaging instructions: Y956.  
**Special provisions** A97, A158, A179, A197, A215
- 14.6 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.

**14.7 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**

**EU Regulation (EC) No. 1907/2006 (REACH)**

**Annex XIV - List of substances subject to authorisation**

**Annex XIV**

None of the components are listed.

**Substances of very high concern**

None of the components are listed.

**Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles**

No listed substance

<b>Label</b>	: XF oligomycin A	Not applicable.
	: XF Bam15	Not applicable.
	: XF Rot/AA	Not applicable.

**Other EU regulations**

**Ozone depleting substances (1005/2009/EU)**

Not listed.

**Prior Informed Consent (PIC) (649/2012/EU)**

Not listed.

**Persistent Organic Pollutants**

Not listed.

**Seveso Directive**

This product is controlled under the Seveso Directive.

**Danger criteria**

## SECTION 15: Regulatory information

### Category

XF Rot/AA  
E1

### 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

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

**15.2 Chemical safety assessment** : This product contains substances for which Chemical Safety Assessments might still be required.

## SECTION 16: Other information

🔍 Indicates information that has changed from previously issued version.

**Abbreviations and acronyms** :

- ATE = Acute Toxicity Estimate
- CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
- DMEL = Derived Minimal Effect Level
- DNEL = Derived No Effect Level
- EUH statement = CLP-specific Hazard statement
- N/A = Not available
- PBT = Persistent, Bioaccumulative and Toxic
- PNEC = Predicted No Effect Concentration
- RRN = REACH Registration Number
- vPvB = Very Persistent and Very Bioaccumulative

[Procedure used to derive the classification according to Regulation \(EC\) No. 1272/2008 \[CLP/GHS\]](#)

**Seahorse XF T Cell Metabolic Profiling Kit**

**SECTION 16: Other information**

Classification	Justification
<b>XF Rot/AA</b> Aquatic Acute 1, H400 Aquatic Chronic 1, H410	Calculation method Calculation method

Full text of abbreviated H statements

<b>XF Rot/AA</b> H300 H301 H315 H319 H335 H400 H410	Fatal if swallowed. Toxic if swallowed. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.
--	--

Full text of classifications [CLP/GHS]

<b>XF Rot/AA</b> Acute Tox. 2 Acute Tox. 3 Aquatic Acute 1 Aquatic Chronic 1 Eye Irrit. 2 Skin Irrit. 2 STOT SE 3	ACUTE TOXICITY - Category 2 ACUTE TOXICITY - Category 3 SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2 SKIN CORROSION/IRRITATION - Category 2 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3
--	--

**Date of issue/ Date of revision** : 10/06/2024

**Date of previous issue** : No previous validation

**Version** : 1

Notice to reader

**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.