

SAFETY DATA SHEET

Mito-rOCR starter kit

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

1.1 Product identifier

Product name	: Mito-rOCR starter kit	
CAS number	: Agilent GOx	9001-37-0
	: rOCR Reagent	Not available.
	: Agilent Rot/AA	Not applicable.
Part no. (chemical kit)	: MO-300-4, MO-400-4	
Part no.	: Agilent GOx	103714-100
	: rOCR Reagent	103704-100
	: Agilent Rot/AA	103712-100

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

Identified uses	: For research use only.	
	: Agilent GOx	4 x 1.1 mg
	: rOCR Reagent	4 x 210 ug
	: Agilent Rot/AA	4 x 1.145 mg
Uses advised against	: 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

Note * : Mito-rOCR Assay Kit MO-300-4
Mito-rOCR Assay Starter Kit MO-400-4

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition	: Agilent GOx	Mono-constituent substance
	: rOCR Reagent	UVCB
	: Agilent Rot/AA	Mixture

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

Agilent GOx H334	RESPIRATORY SENSITISATION	Category 1
Agilent Rot/AA H400 H410	SHORT-TERM (ACUTE) AQUATIC HAZARD LONG-TERM (CHRONIC) AQUATIC HAZARD	Category 1 Category 1
Agilent GOx	The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.	
rOCR Reagent	The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.	
Agilent Rot/AA	The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.	

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SECTION 2: Hazards identification

Ingredients of unknown toxicity : Agilent 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.

2.2 Label elements

Hazard pictograms : Agilent GOx



Agilent Rot/AA



Signal word : Agilent GOx
rOCR Reagent
Agilent Rot/AA

Danger
No signal word.
Warning

Hazard statements : Agilent GOx

rOCR Reagent
Agilent Rot/AA

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.
No known significant effects or critical hazards.
H410 - Very toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention : Agilent GOx

rOCR Reagent
Agilent Rot/AA

P284 - Wear respiratory protection.
P261 - Avoid breathing dust.
Not applicable.
P273 - Avoid release to the environment.

Response : Agilent GOx

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P342 + P311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor.

Storage : Agilent GOx
rOCR Reagent
Agilent Rot/AA

Not applicable.
Not applicable.
Not applicable.

Disposal : Agilent GOx

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

Supplemental label elements : Agilent GOx
rOCR Reagent
Agilent 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 : Agilent GOx
rOCR Reagent
Agilent Rot/AA

Not applicable.
Not applicable.
Not applicable.

Special packaging requirements

Tactile warning of danger : Agilent GOx
rOCR Reagent
Agilent Rot/AA

Not applicable.
Not applicable.
Not applicable.

2.3 Other hazards

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SECTION 2: Hazards identification

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII	PBT	P	B	T	vPvB	vP	vB
	Agilent GOx No	N/A	N/A	No	N/A	N/A	N/A
	rOCR Reagent N/A	N/A	N/A	N/A	N/A	N/A	N/A
Agilent Rot/AA		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	Agilent GOx	None known.					
	rOCR Reagent	May form combustible dust concentrations in air.					
	Agilent Rot/AA	None known.					

SECTION 3: Composition/information on ingredients

3.1 Substances	Agilent GOx rOCR Reagent Agilent Rot/AA	Mono-constituent substance UVCB Mixture
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Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Type
Agilent GOx Oxidase, glucose	EC: 232-601-0 CAS: 9001-37-0	100	Resp. Sens. 1, H334	-	[1]
rOCR Reagent Conjugated dye (Proprietary)	-	100	Not classified.	-	[1]
Agilent Rot/AA 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	≤0.3	Acute Tox. 3, H301 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 See Section 16 for the full text of the H statements declared above.	ATE [Oral] = 100 mg/kg M [Acute] = 100 M [Chronic] = 100	[1] [2]

* Non-hazardous ingredients: Conjugated dye (Proprietary)

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

Agilent GOx	[1] Constituent
rOCR Reagent	[1] Constituent
Agilent 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	: Agilent GOx	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.
	rOCR Reagent	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.
	Agilent 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	: Agilent GOx	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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 necessary, call a poison center or physician. 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. In the event of any complaints or symptoms, avoid further exposure.
	rOCR Reagent	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
	Agilent Rot/AA	Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Skin contact	: Agilent GOx	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.
	rOCR Reagent	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	Agilent Rot/AA	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Ingestion	: Agilent GOx	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 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.
	rOCR Reagent	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.
	Agilent 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

SECTION 4: First aid measures

Protection of first-aiders	: Agilent GOx	do so by medical personnel.
	rOCR Reagent	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
	Agilent 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

Eye contact	: Agilent GOx rOCR Reagent	No known significant effects or critical hazards. Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.
	Agilent Rot/AA	No known significant effects or critical hazards.
Inhalation	: Agilent GOx	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
	rOCR Reagent	Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.
	Agilent Rot/AA	No known significant effects or critical hazards.
Skin contact	: Agilent GOx rOCR Reagent Agilent Rot/AA	No known significant effects or critical hazards.
Ingestion	: Agilent GOx rOCR Reagent Agilent Rot/AA	No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact	: Agilent GOx rOCR Reagent	No specific data. Adverse symptoms may include the following: irritation redness
	Agilent Rot/AA	No specific data.
Inhalation	: Agilent GOx	Adverse symptoms may include the following: wheezing and breathing difficulties asthma
	rOCR Reagent	Adverse symptoms may include the following: respiratory tract irritation coughing
	Agilent Rot/AA	No specific data.
Skin contact	: Agilent GOx rOCR Reagent Agilent Rot/AA	No specific data.
Ingestion	: Agilent GOx rOCR Reagent Agilent Rot/AA	No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician	: Agilent GOx	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	rOCR Reagent	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
	Agilent Rot/AA	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

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SECTION 4: First aid measures

Specific treatments	: Agilent GOx rOCR Reagent Agilent Rot/AA	No specific treatment. No specific treatment. No specific treatment.
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SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	: Agilent GOx rOCR Reagent Agilent Rot/AA	Use an extinguishing agent suitable for the surrounding fire. Use dry chemical powder. Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	: Agilent GOx rOCR Reagent Agilent Rot/AA	None known. Avoid high pressure media which could cause the formation of a potentially explosible dust-air mixture. None known.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture	: Agilent GOx rOCR Reagent Agilent Rot/AA	No specific fire or explosion hazard. May form explosible dust-air mixture if dispersed. 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 combustion products	: Agilent GOx rOCR Reagent Agilent Rot/AA	Decomposition products may include the following materials: carbon dioxide carbon monoxide Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides sulfur oxides phosphorus oxides metal oxide/oxides Decomposition products may include the following materials: halogenated compounds metal oxide/oxides

5.3 Advice for firefighters

Special precautions for fire-fighters	: Agilent GOx rOCR Reagent Agilent 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. 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.
Special protective equipment for fire-fighters	: Agilent GOx rOCR Reagent Agilent 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. 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. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full

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SECTION 5: Firefighting measures

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

For non-emergency personnel

: Agilent GOx

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. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

rOCR Reagent

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. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing dust. Put on appropriate personal protective equipment.

Agilent 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.

For emergency responders

: Agilent GOx

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".

rOCR Reagent

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".

Agilent 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

: Agilent GOx

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).

rOCR Reagent

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).

Agilent 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

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SECTION 6: Accidental release measures

Methods for cleaning up	: Agilent GOx	Move containers from spill area. Avoid dust generation. Using a vacuum with HEPA filter will reduce dust dispersal. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.
	rOCR Reagent	Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Vacuum or sweep up material and place in a designated, labelled waste container. Dispose of via a licensed waste disposal contractor.
	Agilent 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

Protective measures	: Agilent GOx	Put on appropriate personal protective equipment (see Section 8). Persons with a history of asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. 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. Empty containers retain product residue and can be hazardous. Do not reuse container.
	rOCR Reagent	Put on appropriate personal protective equipment (see Section 8). 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. 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 earthing and bonding containers and equipment before transferring material.
	Agilent 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.
Advice on general occupational hygiene	: Agilent GOx	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.
	rOCR Reagent	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.

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SECTION 7: Handling and storage

Agilent 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

Storage

: Agilent GOx

Store between the following temperatures: 2 to 8°C (35.6 to 46.4°F). 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.

rOCR Reagent

Store between the following temperatures: 2 to 8°C (35.6 to 46.4°F). Store in accordance with local regulations. Shelf life: 24 months. 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 oxidising 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 unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Agilent 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 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
Agilent Rot/AA E1	100 tonne	200 tonne

7.3 Specific end use(s)

Recommendations

: Agilent GOx
rOCR Reagent
Agilent Rot/AA

Industrial applications, Professional applications.
Industrial applications, Professional applications.
Industrial applications, Professional applications.

Industrial sector specific solutions

: Agilent GOx
rOCR Reagent
Agilent 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
Agilent 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	NAOSH (Ireland, 5/2021). Notes: Advisory Occupational Exposure Limit Values (OELVs) OELV: 5 mg/m ³ 8 hours.

Biological exposure indices

No exposure indices known.

Recommended monitoring procedures

: 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

Appropriate engineering controls

: Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

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. 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.

SECTION 8: Exposure controls/personal protection

- 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**

Physical state	: Agilent GOx rOCR Reagent Agilent Rot/AA	Solid. Solid. [lyophilised / Powder.] Solid.
Colour	: Agilent GOx rOCR Reagent Agilent Rot/AA	Yellow. Red. White.
Odour	: Agilent GOx rOCR Reagent Agilent Rot/AA	Not available. Not available. Odourless.
Odour threshold	: Agilent GOx rOCR Reagent Agilent Rot/AA	Not available. Not available. Not available.
Melting point/freezing point	: Agilent GOx rOCR Reagent Agilent Rot/AA	Not available. Not available. Not available.
Initial boiling point and boiling range	: Agilent GOx rOCR Reagent Agilent Rot/AA	Not available. Not available. Not available.
Flammability	: Agilent GOx rOCR Reagent Agilent Rot/AA	Not available. Not available. Not available.
Upper/lower flammability or explosive limits	: Agilent GOx rOCR Reagent Agilent Rot/AA	Not applicable. Not applicable. Not applicable.
Flash point	: Agilent GOx rOCR Reagent Agilent Rot/AA	Not applicable. Not applicable. Not applicable.
Auto-ignition temperature	: Agilent GOx rOCR Reagent Agilent Rot/AA	Not applicable. Not applicable. Not applicable.
Decomposition temperature	: Agilent GOx rOCR Reagent Agilent Rot/AA	Not available. Not available. Not available.
pH	: Agilent GOx rOCR Reagent Agilent Rot/AA	Not available. Not available. Not available.
Viscosity	: Agilent GOx rOCR Reagent Agilent Rot/AA	Not applicable. Not applicable. Not applicable.

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SECTION 9: Physical and chemical properties

Solubility(ies)	Media	Result
	Agilent GOx water	Soluble
	rOCR Reagent water	Soluble
	Agilent Rot/AA water	Soluble
Partition coefficient: n-octanol/water	Agilent GOx rOCR Reagent Agilent Rot/AA	Not available. Not available. Not applicable.
Vapour pressure		Not available.
Evaporation rate	Agilent GOx rOCR Reagent Agilent Rot/AA	Not available. Not available. Not available.
Relative density	Agilent GOx rOCR Reagent Agilent Rot/AA	Not available. Not available. Not available.
Vapour density	Agilent GOx rOCR Reagent Agilent Rot/AA	Not applicable. Not applicable. Not applicable.
Explosive properties	Agilent GOx rOCR Reagent Agilent Rot/AA	Not available. Not available. Not available.
Oxidising properties	Agilent GOx rOCR Reagent Agilent Rot/AA	Not available. Not available. Not available.
Particle characteristics		
Median particle size	Agilent GOx rOCR Reagent Agilent Rot/AA	Not available. Not available. Not available.

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity	Agilent GOx rOCR Reagent Agilent 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.
10.2 Chemical stability	Agilent GOx rOCR Reagent Agilent Rot/AA	The product is stable. Shelf life: 24 months. The product is stable.
10.3 Possibility of hazardous reactions	Agilent GOx rOCR Reagent Agilent Rot/AA	Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur.

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SECTION 10: Stability and reactivity

10.4 Conditions to avoid	: Agilent GOx rOCR Reagent	No specific data. 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 earthing and bonding containers and equipment before transferring material. Prevent dust accumulation.
	Agilent Rot/AA	No specific data.
10.5 Incompatible materials	: Agilent GOx rOCR Reagent	May react or be incompatible with oxidising materials. Reactive or incompatible with the following materials: oxidising materials
	Agilent Rot/AA	May react or be incompatible with oxidising materials.
10.6 Hazardous decomposition products	: Agilent GOx rOCR Reagent	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	Agilent 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
Agilent GOx Oxidase, glucose	LD50 Oral	Rat - Male, Female	>5000 mg/kg	-
Agilent 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	LD50 Oral LD50 Oral	Rat Rat	28 mg/kg 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)
Agilent Rot/AA Agilent 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	9000.9 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
Agilent 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	Eyes - Mild irritant	Rabbit	-	1 %	-

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Sensitiser

Conclusion/Summary : 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)

Product/ingredient name	Category	Route of exposure	Target organs
Agilent 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	Category 3	-	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on likely routes of exposure

Agilent GOx
rOCR Reagent
Agilent Rot/AA

Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.
Not available.
Not available.

Potential acute health effects

Inhalation

Agilent GOx

rOCR Reagent

Agilent Rot/AA

May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.
No known significant effects or critical hazards.

Ingestion

Agilent GOx
rOCR Reagent
Agilent Rot/AA

No known significant effects or critical hazards.
No known significant effects or critical hazards.
No known significant effects or critical hazards.

Skin contact

Agilent GOx
rOCR Reagent
Agilent Rot/AA

No known significant effects or critical hazards.
No known significant effects or critical hazards.
No known significant effects or critical hazards.

Eye contact

Agilent GOx
rOCR Reagent

Agilent Rot/AA

No known significant effects or critical hazards.
Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.
No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation

Agilent GOx

rOCR Reagent

Agilent Rot/AA

Adverse symptoms may include the following:
wheezing and breathing difficulties
asthma
Adverse symptoms may include the following:
respiratory tract irritation
coughing
No specific data.

Ingestion

Agilent GOx
rOCR Reagent
Agilent Rot/AA

No specific data.
No specific data.
No specific data.

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Skin contact	: Agilent GOx rOCR Reagent Agilent Rot/AA	No specific data. No specific data. No specific data.
Eye contact	: Agilent GOx rOCR Reagent Agilent Rot/AA	No specific data. Adverse symptoms may include the following: irritation redness 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.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Conclusion/Summary : Not available.

General	: Agilent GOx rOCR Reagent Agilent Rot/AA	Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels. Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation. No known significant effects or critical hazards.
Carcinogenicity	: Agilent GOx rOCR Reagent Agilent Rot/AA	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
Mutagenicity	: Agilent GOx rOCR Reagent Agilent Rot/AA	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
Reproductive toxicity	: Agilent GOx rOCR Reagent Agilent 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
Agilent GOx Oxidase, glucose	Acute EC50 88.3 mg/l Fresh water Acute EC50 26.2 mg/l Fresh water	Algae - <i>Scenedesmus sp.</i> Daphnia - <i>Daphnia magna</i>	72 hours 48 hours
Agilent 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-	Acute LC50 0.000019 mg/l Fresh water Acute EC50 190 µg/l Fresh water	Fish - <i>Oncorhynchus mykiss</i> Crustaceans - <i>Simocephalus serrulatus</i> - Larvae	96 hours 48 hours

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SECTION 12: Ecological information

6-one	Acute EC50 3.7 µg/l Fresh water Acute LC50 1.9 ppb Fresh water Chronic NOEC 0.3 ppb Fresh water Chronic NOEC 1.01 ppb	Daphnia - <i>Daphnia magna</i> Fish - <i>Oncorhynchus mykiss</i> Daphnia - <i>Daphnia magna</i> Fish - <i>Oncorhynchus mykiss</i>	48 hours 96 hours 21 days 32 days
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12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Agilent GOx Oxidase, glucose	OECD 301E Ready Biodegradability - Modified OECD Screening Test	91 % - Readily - 28 days	-	-

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Agilent GOx Oxidase, glucose	-	-	Readily

12.3 Bioaccumulative potential

Product/ingredient name	Log _{P_{ow}}	BCF	Potential
Agilent 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	4.1	25.7	Low

12.4 Mobility in soil

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

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

Product/ingredient name	PBT	P	B	T	vPvB	vP	vB
Agilent GOx Oxidase, glucose	No	N/A	N/A	No	N/A	N/A	N/A
rOCR Reagent Conjugated dye (Proprietary)	N/A	N/A	N/A	N/A	N/A	N/A	N/A

12.6 Endocrine disrupting properties

Not available.

12.7 Other adverse effects

No known significant effects or critical hazards.

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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.


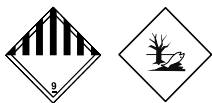
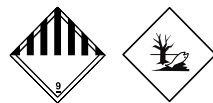
Hazardous waste : The classification of the product may meet the criteria for a hazardous waste.

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 spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

	ADR/RID	IMDG	IATA
14.1 UN number or ID number	UN3077	UN3077	UN3077
14.2 UN proper shipping name	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)
14.3 Transport hazard class(es)	9 	9 	9 
14.4 Packing group	III	III	III
14.5 Environmental hazards	Yes.	Yes.	Yes.

Additional 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

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SECTION 14: Transport information

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

Label	: Agilent GOx rOCR Reagent Agilent Rot/AA	Not applicable. Not applicable. Not applicable.
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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

Category

Agilent 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.

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SECTION 15: Regulatory information

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

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]

Classification	Justification
 Agilent GOx Resp. Sens. 1, H334	Expert judgment
Agilent Rot/AA Aquatic Acute 1, H400 Aquatic Chronic 1, H410	Calculation method Calculation method

Full text of abbreviated H statements

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SECTION 16: Other information

<p>Agilent GOx H334</p> <p>Agilent Rot/AA H300 H301 H315 H319 H335 H400 H410</p>	<p>May cause allergy or asthma symptoms or breathing difficulties if inhaled.</p> <p>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.</p>
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[Full text of classifications \[CLP/GHS\]](#)

<p>Agilent GOx Resp. Sens. 1</p> <p>Agilent Rot/AA Acute Tox. 2 Acute Tox. 3 Aquatic Acute 1 Aquatic Chronic 1 Eye Irrit. 2 Skin Irrit. 2 STOT SE 3</p>	<p>RESPIRATORY SENSITISATION - Category 1</p> <p>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</p>
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Date of issue/ Date of revision : 15/04/2024

Date of previous issue : 30/06/2023

Version : 3

Note * : Mito-rOCR Assay Kit MO-300-4
Mito-rOCR Assay Starter Kit MO-400-4

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