



SAFETY DATA SHEET

Oligomycin

according to Regulation
(EC) No. 1272/2008
Version 1.0
Date: 03-08-2017

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

1.1 Product identifier

Product Name: Oligomycin
Product Part Number: MXC-601

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

Use of the substance/preparation: Laboratory Chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet

Name of Manufacturer: Luxcel Biosciences Ltd
Address of Manufacturer: Hoffmann Park, Inchera,
Little Island, Cork,
T45 YX04
Ireland
Telephone: +353 (0)21 2428880
Website: www.luxcel.com
Email: info@luxcel.com

1.4 Emergency telephone number

Emergency Tel No: +353 (0)21 2428880 (08.30 – 17.00 GMT)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [EU-GHS/CLP]
Acute toxicity, Oral (Category 3)

Classification according to EU Directives 67/548/EEC or 1999/45/EC
Harmful if swallowed.

2.2 Label elements

Pictogram



Signal word

Danger

Hazard statement(s)

H301

Toxic if swallowed.

Precautionary statement(s)

P301 + P310

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

Supplemental Hazard Statements

None

According to European Directive 67/548/EEC as amended.

Hazard symbol(s)



R-phrases)

R22

Harmful if swallowed.

S-phrases)

None

2.3 Other Hazards

None



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SECTION 3: Composition/information on ingredients

3.1 Mixtures

Component	Classification	Concentration
Oligomycin A		
CAS-No. 579-13-5	Acute Tox. 4; H302	-
EC-No. 29-437-3	Xn, R22	
Oligomycin A, 28-oxo-		
CAS-No. 11050-94-5	Acute Tox. 4; H302	-
EC-No. 234-275-5	Xn, R22	
Oligomycin A, 12-deoxy-		
CAS-No. 11052-72-5	Acute Tox. 4, H302	-
EC-No. 234-276-0	Xn, R22	
Methanol		
CAS-No. 67-56-1	Flam. Liq. 2; Acute Tox. 3;	1 – 3 %
EC-No. 200-659-6	STOT SE 1; H225, H301, H311, H331,	
Index-No. 603-001-00-X	H370	
	F, T, R11 – R23/24/25 – R39/23/24/25	

For the full text of the H-Statements and R-Phrases mentioned in this section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move the person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Take the victim immediately to hospital. Consult a physician.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.

4.2 Most important symptoms and effects, both acute and delayed

Warning: contains methanol. May be fatal or cause blindness if swallowed. Cannot be made nonpoisonous. Gastrointestinal disturbance. May cause convulsions.

4.3 Indication of any immediate medical attention and special treatment needed

No data available



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SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

Use water-spray, alcohol-resistant foam, dry chemical, or carbon dioxide.

5.2 Special hazard arising from the substance or mixture

Carbon oxides

5.3 Advice for firefighters

Wear self-contained breathing apparatus for fire-fighting if necessary.

5.4 Further information

No data available

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

6.2 Environmental Precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3 Methods and material for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.
Provide appropriate exhaust ventilation at places where dust is formed.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.
Recommended storage temperature: -20°C

7.3 Specific end use(s)

No data available.



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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components with workplace control parameters

Component	CAS-No.	Value	Control Parameters	Basis
Methanol	67-59-1	OELV – 8 hrs (TWA)	200 ppm 260 mg/m ³	Ireland. List of Chemical Agents and Occupational Exposure Limit Values. -Schedule 1
	Remarks	Substances which have the capacity to penetrate intact skin when they come in contact with it, and be absorbed into the body Where no specific short-term exposure limit is listed, a figure three times the long-term exposure limit value should be used Indicative Occupational Exposure Limit Value		
		TWA	200 ppm 260 mg/m ³	Europe. Indicative occupational exposure limit values.
		Indicates the possibility of significant uptake through the skin Indicative		

8.2 Exposure controls

Appropriate engineering controls

Avoid contact with skin, eyes, and clothing. Wash hands before breaks and immediately after handling the product.

Personal protective equipment

Eye/face protection

Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.

Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Body Protection

Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N99 (US) or type P2 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).



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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance Form:	powder, white
b) Odour	no data available
c) Odour Threshold	no data available
d) pH	no data available
e) Melting point/freezing point	Melting point/range: 150°C
f) Initial boiling point and boiling range	no data available
g) Flash point	no data available
h) Evaporation rate	no data available
i) Flammability (solid, gas)	no data available
j) Upper/lower flammability or explosive limits	no data available
k) Vapour pressure	no data available
l) Vapour density	no data available
m) Relative density	no data available
n) Water solubility	no data available
o) Partition coefficient: n-octanol/water	no data available
p) Auto-ignition temperature	no data available
q) Decomposition temperature	no data available
r) Viscosity	no data available
s) Explosive properties	no data available
t) Oxidizing properties	no data available

9.2 Other information

No information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

No information available.

10.2 Chemical stability

No data available.

10.3 Possibility of hazardous reactions

No data available.

10.4 Conditions to avoid

No data available.

10.5 Incompatible materials

Acids, oxidizing agents, alkali metals, strong oxidizing agents, acid chlorides, acid anhydrides, reducing agents.

10.6 Hazardous Decomposition Products

Other decomposition products: No data available.



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SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

No data available

Skin corrosion/ irritation

No data available

Serious eye damage/ eye irritation

No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

No data available

Specific target organ toxicity – Single exposure

No data available

Specific target organ toxicity – Repeated exposure

No data available

Aspiration hazard

No data available

Potential Health effects

Inhalation	Toxic if inhaled. May cause respiratory tract irritation.
Ingestion	Toxic if swallowed.
Skin	Toxic if absorbed through skin. May cause skin irritation.
Eyes	May cause eye irritation.

Signs and Symptoms of Exposure

Warning: contains methanol. May be fatal or cause blindness if swallowed. Cannot be made non-poisonous. Gastrointestinal disturbance. May cause convulsions.

Additional information

RTECS: not available



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SECTION 12: Ecological information

12.1 Toxicity

No data available.

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available.

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

No data available

12.6 Other adverse effects

No data available

SECTION 13 Disposal considerations

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated Packaging

Dispose of as unused product

SECTION 14: Transport information

14.1 UN NUMBER

ADR/RID:-

IMDG:-

IATA:-

14.2 UN proper shipping name

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

14.3 Transport hazard class(es)

ADR/RID:-

IMDG:-

IATA:-

14.4 Packaging group

ADR/RID:-

IMDG:-

IATA:-

14.5 Environmental Hazards

ADR/RID:- no

IMDG Marine pollutant: no

IATA:- no

14.6 Special precautions for the user

No data available



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SECTION 15: Regulatory information

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

This Safety Data Sheet is provided in compliance with the EC Directive 1907/2006

15.2 Chemical Safety Assessment

No data available

SECTION 16: Other information

Additional Information about this product:

Acute Tox.	Acute toxicity
Flam. Liq.	Flammable liquids
H225	Highly flammable liquid and vapour
H301	Toxic if swallowed.
H32	Harmful if swallowed.
H311	Toxic in contact with skin
H370	Causes damage to organs.
STOT SE	Specific target organ toxicity – single exposure
F	Highly flammable
R11	Highly flammable
R22	Harmful if swallowed.
R23/24/25	Toxic by inhalation, in contact with skin and if swallowed
T	Toxic
R39/23/24/25	Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.
Xn	Harmful

Company Policy or Disclaimer:

This document is believed to be correct, but does not purport to be all inclusive and shall be used only as a guide. We make no warranty of the merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes.



SAFETY DATA SHEET

FCCP

according to
Regulation (EC) No.
1907/2006
Version 1.0
Date: 16-06-2017

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

1.1 Product identifier

Product Name: FCCP [Carbonyl cyanide 4-(trifluoromethoxy)phenylhydrazone]
Product Part Number: MXC-602

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

Use of the substance/preparation: Laboratory Chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet

Company: Luxcel Biosciences Ltd
Hoffmann Park, Inchera
Little Island, Cork,
T45 YX04
Ireland
Telephone: +353 (0)21 2428880
Website: www.luxcel.com
E-mail: info@luxcel.com

1.4 Emergency telephone number

Emergency Tel No: +353 (0)21 2428880 (08.30 – 17.00 GMT)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Acute toxicity, Oral (Category 3), H301
Skin sensitisation (Category 1), H317
Chronic aquatic toxicity (Category 4), H413

For the full text of the H-Statements mentioned in this Section, see Section 16.

Classification according to EU Directives 67/548/EEC or 1999/45/EC

T Toxic R25, R43

For the full text of the R-phrases mentioned in this Section, see Section 16.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram



Signal word Danger
Hazard statement(s)
H301 Toxic if swallowed.
H317 May cause an allergic skin reaction.
H413 May cause long lasting harmful effects to aquatic life.
Precautionary statement(s)
P280 Wear protective gloves.



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P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/Physician.
Supplemental Hazard none
Statements

2.3 Other hazards – none

SECTION 3: Composition/information on ingredients

3.1 Substances

Synonyms: Carbonyl cyanide 4-(trifluoromethoxy) phenylhydrazone
Mesoxalonitrile 4-trifluoromethoxyphenylhydrazone
FCCP

Formula: $C_{10}H_5F_3N_4O$
Molecular Weight: 254.17 g/mol
CAS-No.: 370-86-5
EC-No.: 206-730-8

Hazardous ingredients according to Regulation (EC) No 1272/2008

Component	Classification	Concentration
[[4-(Trifluoromethoxy)phenyl]hydrazono]malononitrile		
CAS-No. 370-86-5 EC-No. 206-730-8	Acute Tox. 3; Skin Sens. 1; Aquatic Chronic 4; H301, H317, H413	<= 100 %

Hazardous ingredients according to Directive 1999/45/EC

Component	Classification	Concentration
[[4-(Trifluoromethoxy)phenyl]hydrazono]malononitrile		
CAS-No. 370-86-5 EC-No. 206-730-8	T, R25 - R43	<= 100 %

For the full text of the H-Statements and R-Phrases mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed



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The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazard arising from the substance or mixture

Carbon oxides, Nitrogen oxides (NO_x), Hydrogen fluoride

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

No data available

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

For personal protection see section 8.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed.

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

Recommended storage temperature: 2 - 8 °C

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated



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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Appropriate engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product

Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Body Protection

Complete suit protecting against chemicals, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection



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Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N99 (US) or type P2 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance:	Form: Powder
b) Odour	Colour: Dark yellow
c) Odour Threshold	No data available
d) pH	No data available
e) Melting point/freezing point	Melting point/range: 174 - 175°C
f) Initial boiling point and boiling range	No data available
g) Flash point	No data available
h) Evaporation rate	No data available
i) Flammability (solid, gas)	No data available
j) Upper/lower flammability or explosive limits	No data available
k) Vapour pressure	No data available
l) Vapour density	No data available
m) Relative density	No data available
n) Water solubility	No data available
o) Partition coefficient: n-octanol/water	log Pow: 4.032
p) Auto-ignition temperature	No data available
q) Decomposition temperature	No data available
r) Viscosity	No data available
s) Explosive properties	No data available
t) Oxidizing properties	no data available

9.2 Other Safety information

No information available

SECTION 10: Stability and reactivity

10.1 Reactivity

No information available

10.2 Chemical stability

Stable under recommended storage conditions.



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10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

Strong acid, Strong bases, Strong oxidizing agents, Strong reducing agents

10.6 Hazardous Decomposition Products

Other decomposition products - No data available
In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

LD50 Intraperitoneal - mouse - 8 mg/kg

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitisation

Germ cell mutagenicity

No data available

Carcinogenicity

IARC: No component of this product, present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Additional Information

RTECS: FG5775000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.



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SECTION 12: Ecological information

12.1 Toxicity

No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects

No data available

SECTION 13 Disposal considerations

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated Packaging

Dispose of as unused product

SECTION 14: Transport information

14.1 UN NUMBER

ADR/RID:- 2811

IMDG:- 2811

IATA:- 2811

14.2 UN proper shipping name

ADR/RID: TOXIC SOLID, ORGANIC, N.O.S. ([[4-(Trifluoromethoxy)phenyl]hydrazono]malononitrile)

IMDG: TOXIC SOLID, ORGANIC, N.O.S. ([[4-(Trifluoromethoxy)phenyl]hydrazono]malononitrile)

IATA: Toxic solid, organic, N.O.S. ([[4-(Trifluoromethoxy)phenyl]hydrazono]malononitrile)

14.3 Transport hazard class(es)

ADR/RID:- 6.1

IMDG:- 6.1

IATA:- 6.1

14.4 Packaging group

ADR/RID:- II

IMDG:- II

IATA:- II

14.5 Environmental Hazards

ADR/RID:- no

IMDG Marine pollutant: no

IATA:- no



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14.6 Special precautions for the user

No data available

SECTION 15: Regulatory information

This Safety Data Sheet is provided in compliance with the EC Directive 1907/2006.

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

No data available

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

SECTION 16: Other information

Full text of H-Statements referred to under sections 2 and 3.

Acute Tox:	Acute toxicity
Aquatic Chronic	Chronic aquatic toxicity
H301	Toxic if swallowed.
H317	May cause an allergic skin reaction.
H413	May cause long lasting harmful effects to aquatic life.
Skin Sens.	Skin sensitisation

Full text of R-phrases referred to under sections 2 and 3

T	Toxic
R25	Toxic if swallowed.
R43	May cause sensitisation by skin contact.

Further information

This document is believed to be correct, but does not purport to be all inclusive and shall be used only as a guide. We make no warranty of the merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes.



SAFETY DATA SHEET

Antimycin A

according to Regulation
(EC) No. 1907/2006
Version 1.0
Date: 03-08-2017

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

1.1 Product identifier

Product Name: Antimycin A, from *Streptomyces sp.*

Product Part Number: MXC-603

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

Use of the substance/preparation: Laboratory Chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet

Name of Manufacturer: Luxcel Biosciences Ltd
Address of Manufacturer: Hoffmann Park, Inchera,
Little Island, Cork,
T45 YX04
Ireland
Telephone: +353 (0)21 2428880
Website: www.luxcel.com
Email: info@luxcel.com

1.4 Emergency telephone number

Emergency Tel No: +353 (0)21 2428880 (08.30 – 17.00 GMT)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

Acute toxicity, Oral (Category 2)

Acute aquatic toxicity (Category 1)

Classification according to EU Directives 67/548/EEC

Toxic if swallowed.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 [CLP]

Pictogram



Signal Word

Danger

Hazard Statement(s)

H300

Fatal if swallowed.

H400

Very toxic to aquatic life.

Precautionary statement(s)

P264

Wash hands thoroughly after handling.

P273

Avoid releasing into the environment.

P301 + P310

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

Supplemental Hazard

None



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Statements

According to European Directive 67/548/EEC as amended.

Hazard symbol(s)



R-phrases(s)

R25

Toxic if swallowed.

S-phrases(s)

S26

In Case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S36/37/39

Wear suitable protective clothing, gloves, and eye/face protection.

S45

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

2.3 Other Hazards – None

SECTION 3: Composition/information on ingredients

3.1 Substances

Component	Concentration
Antimycin A	
CAS-No.	1397-94-0
	-

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If Inhaled

If breathed in, move person in into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

In case of contact with eyes

Flush eyes with water as precaution.

If swallowed

Rinse mouth with water (do not swallow). Never give anything by mouth to an unconscious person. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

4.3 Indication of any immediate medical attention and special treatment needed

No data available



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SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazard arising from the substance or mixture

Nature of decomposition products not known.

5.3 Advice for firefighters

Wear chemical protection suit and positive-pressure breathing apparatus

Wear protective clothing as per section 8

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid dust formation. Avoid breathing dust, vapors, mist or gas, and provide adequate ventilation. Evacuate personnel to safe areas.

6.2 Environmental Precautions

Prevent further leakage or spillage if safe to do so. Do not let the product enter public drains. Discharge into environment must be avoided.

6.3 Methods and material for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool place. Keep container tightly closed in a dry and well-ventilated place.

Recommended storage temperature: -20°C

Moisture sensitive.

7.3 Specific end use(s)

No specific data available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.



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8.2 Exposure controls

Appropriate engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately handling the product.

Personal protective equipment

Eye/face protection

Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Body Protection

Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate, use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance Form:	powder, white
b) Odour	no data available
c) Odour Threshold	no data available
d) pH	no data available
e) Melting point/freezing point	no data available
f) Initial boiling point and boiling range	no data available
g) Flash point	no data available
h) Evaporation rate	no data available
i) Flammability (solid, gas)	no data available
j) Upper/lower flammability or explosive limits	no data available
k) Vapour pressure	no data available
l) Vapour density	no data available
m) Relative density	no data available
n) Water solubility	no data available
o) Partition coefficient: n-octanol/water	no data available
p) Auto-ignition temperature	no data available
q) Decomposition temperature	no data available



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r) Viscosity	no data available
s) Explosive properties	no data available
t) Oxidizing properties	no data available

9.2 Other information

No information available

SECTION 10: Stability and reactivity

10.1 Reactivity

No information available.

10.2 Chemical stability

No data available.

10.3 Possibility of hazardous reactions

No data available.

10.4 Conditions to avoid

Avoid moisture.

10.5 Incompatible materials

Strong oxidizing agents.

10.6 Hazardous Decomposition Products

Other decomposition products: No data available.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral – rat – 28mg/kg

Skin corrosion/ irritation

No data available

Serious eye damage/ eye irritation

No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

Genotoxicity in vitro – mouse – lymphocyte
DNA inhibition

Genotoxicity in vitro – mouse – lymphocyte
other mutation test systems

Carcinogenicity

IARC: No component of this product, present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.



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Reproductive toxicity

No data available

Specific target organ toxicity – Single exposure

No data available

Specific target organ toxicity – Repeated exposure

No data available

Aspiration hazard

No data available

Potential health effects

Inhalation	May be harmful if inhaled. May cause respiratory tract irritation.
Ingestion	May be fatal if swallowed.
Skin	May be harmful if absorbed through skin. May cause skin irritation.
Eyes	May cause eye irritation.

Signs and symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Additional information

RTECS: CD0350000

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish	LC50 – Pimephales promelas (fathead minnow) – 0.18µg/L – 96h
Toxicity to daphnia and other aquatic invertebrates	EC – Daphnia magna (water flea) - 5 µg/L – 48h

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

No data available.

12.6 Other adverse effects

Very toxic to aquatic life.



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SECTION 13 Disposal considerations

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated Packaging

Dispose of as unused product

SECTION 14: Transport information

14.1 UN NUMBER

ADR/RID: 3462

IMDG: 3462

IATA: 3462

14.2 UN proper shipping name

ADR/RID: TOXINS EXTRACTED FROM LIVING SOURCES, SOLID, N.O.S (Antimycin A)

IMDG: TOXINS EXTRACTED FROM LIVING SOURCES, SOLID, N.O.S (Antimycin A)

IATA: TOXINS EXTRACTED FROM LIVING SOURCES, SOLID, N.O.S (Antimycin A)

14.3 Transport hazard class(es)

ADR/RID: 6.1

IMDG: 6.1

IATA: 6.1

14.4 Packaging group

ADR/RID: II

IMDG:- II

IATA: II

14.5 Environmental Hazards

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

14.6 Special precautions for the user

No data available

SECTION 15: Regulatory information

This Safety Data Sheet is provided in compliance with the EC Directive 1907/2006.

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

No data available

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.



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SECTION 16: Other information

Further information

This document is believed to be correct, but does not purport to be all inclusive and shall be used only as a guide. We make no warranty of the merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purpose.



SAFETY DATA SHEET

Glucose oxidase

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

1.1 Product identifier

Product Name: Glucose Oxidase, from *Aspergillus niger*
Product Part Number: MXC-604

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

Use of the substance/preparation: Laboratory Chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet

Company: Luxcel Biosciences Ltd
Hoffman Park, Inchera
Little Island, Cork,
T45 YX04
Ireland
Telephone: +353 (0)21 2428880
Website: www.luxcel.com
Email: info@luxcel.com

1.4 Emergency telephone number

Emergency Tel No: +353 (0)21 2428880 (08.30 – 17.00 GMT)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]
Respiratory sensitization (Category 1)

Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]
May cause sensitization by inhalation.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 [CLP]

Pictogram



Signal Word

Danger

Hazard Statement(s)
H334

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Precautionary statement(s)

P261
P342 + P311

Avoid breathing dust/fume/gas/mist/vapour/spray.
If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

Supplemental Hazard
Statements

None

According to European Directive 67/548/EEC as amended.



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Hazard symbol(s)



R-phrase(s)

R42

May cause sensitization by inhalation.

S-phrase(s)

S22

Do not breathe dust.

S45

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

2.3 Other Hazards – None

SECTION 3: Composition/information on ingredients

3.1 Substances

Synonyms: G.Od.
GOx
 β -D-Glucose:oxygen 1-oxidoreductase

Component	Concentration
Oxidase, glucose	
CAS-No. 9001-37-0	-
EC-No. 232-601-0	

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

4.3 Indication of any immediate medical attention and special treatment needed

No data available.



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SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazard arising from the substance or mixture

No data available.

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further Information

No data available.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing dust, vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

6.2 Environmental Precautions

Do not let product enter drains.

6.3 Methods and material for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool place. Keep container tightly closed in a dry and well-ventilated place. Recommended storage temperature: -20°C

7.3 Specific end use(s)

No data available.



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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Use face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.

Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Body Protection

Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG (US) or type ABEK (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

No special environmental precautions required.



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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance:	Form: powder, Lyophilized
b) Odour	No data available
c) Odour Threshold	No data available
d) pH	No data available
e) Melting point/freezing point	No data available
f) Initial boiling point and boiling range	No data available
g) Flash point	Not applicable No data available
h) Evaporation rate	No data available
i) Flammability (solid, gas)	No data available
j) Upper/lower flammability or explosive limits	No data available
k) Vapour pressure	No data available
l) Vapour density	No data available
m) Relative density	1.000 g/cm ³
n) Water solubility	No data available
o) Partition coefficient: n-octanol/water	No data available
p) Auto-ignition temperature	No data available
q) Decomposition temperature	No data available
r) Viscosity	No data available
s) Explosive properties	No data available
t) Oxidizing properties	no data available

9.2 Other Safety information

No information available

SECTION 10: Stability and reactivity

10.1 Reactivity

No information available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

oxidizing agents.

10.6 Hazardous Decomposition Products

Other decomposition products - No data available



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SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

LD50 Intraperitoneal – mouse – 3mg/kg

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitisation

May cause allergic respiratory reaction.

Germ cell mutagenicity

No data available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Potential Health effects

Inhalation	May be harmful if inhaled. May cause respiratory tract irritation.
Ingestion	May be harmful if swallowed.
Skin	May be harmful if absorbed through skin. May cause skin irritation.
Eyes	May cause eye irritation.

Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Additional Information

RTECS: RQ8452000



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SECTION 12: Ecological information

12.1 Toxicity

No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

No data available

12.6 Other adverse effects

No data available

SECTION 13 Disposal considerations

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated Packaging

Dispose of as unused product

SECTION 14: Transport information

14.1 UN NUMBER

ADR/RID:-

IMDG:-

IATA:-

14.2 UN proper shipping name

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

14.3 Transport hazard class(es)

ADR/RID:-

IMDG:-

IATA:-

14.4 Packaging group

ADR/RID:-

IMDG:-

IATA:-

14.5 Environmental Hazards

ADR/RID:- no

IMDG Marine pollutant: no

IATA:- no

14.6 Special precautions for the user

No data available



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SECTION 15: Regulatory information

This Safety Data Sheet is provided in compliance with the EC Directive 1907/2006.

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
No data available

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

SECTION 16: Other information

Further information

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