



# SAFETY DATA SHEET

## Oleate-BSA conjugate

according to Regulation  
(EC) No. 1907/2006  
Version 1.0  
Date: 11-11-2016

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

#### 1.1 Product identifier

Product Name: Oleate-BSA conjugate  
Product Part Number: MXC-501

#### 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](http://www.luxcel.com)  
Email: [info@luxcel.com](mailto: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

Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008  
This substance is not classified as dangerous according to Directive 67/548/EEC.

#### 2.2 Label elements

#### 2.3 Other Hazards – None

### SECTION 3: Composition/information on ingredients

#### 3.1 Substances

No components need to be disclosed according to the applicable regulations.

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

##### If inhaled

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

##### In case of skin contact

Wash off with soap and plenty of water.

##### In case of eye contact

Flush eyes with water as a precaution.



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### 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

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

### 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

Avoid raising and breathing dust, vapors, mist or gas.  
For personal protection see section 8.

### 6.2 Environmental Precautions

Do not let product enter drains.

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

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

Normal measures for preventive fire protection.  
For precautions see section 2.2

### 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.

### 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

Handle in accordance with good industrial hygiene and safety practice.

##### Personal protective equipment

##### Eye/face protection

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

Impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

##### Respiratory protection

Respiratory protection is not required. For nuisance exposures use type OV/AG (US) or type ABEK (EU EN 14387) 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.

### SECTION 9: Physical and chemical properties

#### 9.1 Information on basic physical and chemical properties

a) Appearance:	Form: Liquid
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



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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 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

Strong oxidizing 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

No data available

#### Skin corrosion/irritation

No data available

#### Serious eye damage/eye irritation

No data available

#### Respiratory or skin sensitisation

No data available



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### **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: Not available

## **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



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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.

##### 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

### 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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# SAFETY DATA SHEET

## Bovine Serum Albumin (BSA)

according to Regulation (EC) No. 1907/2006  
Version 1.0  
Date: 11-11-2016

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

#### 1.1 Product identifier

Product Name: Bovine Serum Albumin (BSA)  
Product Part Number: MXC-502

#### 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: Hoffman Park, Inchera,  
Little Island, Cork,  
T45 YX04  
Ireland  
Telephone: +353 (0)21 2428880  
Website: [www.luxcel.com](http://www.luxcel.com)  
Email: [info@luxcel.com](mailto: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)

Not classified as hazardous for supply

This substance is not classified as dangerous according to directive 67/548/EEC

Risk Phrases:

For full text of R-phrases and Hazard- and EU Hazard-statements: see section 15

#### 2.2 Label elements

This substance does not need to be labelled in accordance with EC directives or national laws.

#### 2.3 Other Hazards – None

### SECTION 3: Composition/information on ingredients

#### 3.1 Substances

**Synonyms** : Bovine Albumin  
BSA

**CAS-No.** : 9048-46-8

**EC-No.** : 232-936-2

No components need to be disclosed according to the applicable regulations.



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## Bovine Serum Albumin (BSA)

according to Regulation (EC) No. 1907/2006  
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### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

##### Contact with skin

Wash skin with soap and plenty of water.

##### Contact with eyes

Flush eyes with water as precaution.

##### Ingestion

Rinse mouth with water (do not swallow)

Never make an unconscious person vomit or drink fluids

If medical advice is needed, have product container or label at hand.

##### Inhalation

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration.

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

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

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

Avoid raising and breathing dust, vapors, mist or gas, and provide adequate ventilation

For personal protection see section 8

#### 6.2 Environmental Precautions

Do not allow to enter public sewers and watercourses

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

Sweep and shovel. Keep in suitable, closed containers for disposal.

#### 6.4 Reference to other sections

For disposal see section 13.





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## Bovine Serum Albumin (BSA)

according to Regulation (EC) No. 1907/2006  
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### SECTION 7: Handling and storage

#### 7.1 Precautions for safe handling

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 a cool place. Keep container tightly closed in a dry and well-ventilated place.  
Recommended storage temperature: 2-8°C  
Light sensitive.

#### 7.3 Specific end use(s)

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

### 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.

##### Personal protective equipment

###### Eye/face protection

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)



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## Bovine Serum Albumin (BSA)

according to Regulation (EC) No. 1907/2006  
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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 EN 374, 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

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

### Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

### Control of environmental exposure

Do not let product enter drains

## 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	4.8 - 7.5
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	Lightly soluble
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



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## Bovine Serum Albumin (BSA)

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### 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

Strong oxidizing agents.

#### 10.6 Hazardous Decomposition Products

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

### SECTION 11: Toxicological information

#### 11.1 Information on toxicological effects

##### Acute toxicity

No data available  
Inhalation: no data available  
Dermal: 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



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## Bovine Serum Albumin (BSA)

according to Regulation (EC) No. 1907/2006  
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### 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: Not available

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

## 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

#### Contaminated Packaging

Dispose of as unused product



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## Bovine Serum Albumin (BSA)

according to Regulation (EC) No. 1907/2006  
Version 1.0  
Date: 11-11-2016

### 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

### 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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# SAFETY DATA SHEET

## Base Measurement Media

according to Regulation  
(EC) No. 1272/2008  
Version 1.0  
Revision Date: 11-11-16

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

#### 1.1 Product identifier

- Product Name: **Base Measurement Media**
- Product Part Number: **MXC-503**

#### 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: Hoffman Park, Inchera,  
Little Island, Cork,  
T45 YX04  
Ireland  
Telephone: +353 (0)21 2428880  
Website: [www.luxcel.com](http://www.luxcel.com)  
Email: [info@luxcel.com](mailto: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) [CLP/GHS]

- Not classified as hazardous for supply

##### - Classification (1999/45/EC)

- Not classified as hazardous for supply

Risk Phrases:

For full text of R-phrases and Hazard- and EU Hazard-statements: see section 15

#### 2.2 Label elements

##### - Labeling according to Regulation (EC) No 1272/2008 [CLP]

- GHS Signal Word: None
- GHS Hazard phrases: based on evaluation of currently available data this substance or mixture is not classifiable according to GHS
- GHS Precautionary Phrases: no phrases apply
- GHS Storage and Disposal Phrases: please refer to section 7 for Storage and Section 13 for Disposal information

##### - Labeling according to Directive 1999/45/EC:

#### 2.3 Other Hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very bioaccumulative (vPvB) at levels of 0.1% or higher.



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## Base Measurement Media

according to Regulation  
(EC) No. 1272/2008  
Version 1.0  
Revision Date: 11-11-16

### SECTION 3: Composition/information on ingredients

#### 3.1 Substances

#### 3.2 Mixtures

Phosphate Buffer

No components need to be disclosed according to the applicable regulations.

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

##### - Contact with skin

Immediately wash skin with soap and plenty of water for at least 15 minutes. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.

If skin irritation or rash occurs: Get medical advice/attention.

##### - Contact with eyes

If substance has gotten into eyes, immediately wash out with plenty of water for at least 15 minutes. Irrigate eyes thoroughly while lifting eyelids. Seek medical advice if necessary.

##### - Ingestion

Rinse mouth with water (do not swallow)

Never make an unconscious person vomit or drink fluids

If medical advice is needed, have product container or label at hand.

##### - Inhalation

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration.

Call a POISON CENTER or doctor/physician if you feel unwell.

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

- May cause irritation

- See section 11 for more description of symptoms

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

- No data available



# SAFETY DATA SHEET

## Base Measurement Media

according to Regulation  
(EC) No. 1272/2008  
Version 1.0  
Revision Date: 11-11-16

### SECTION 5: Fire-fighting measures

#### 5.1 Extinguishing media

- In case of fire: use foam, carbon dioxide or dry agent for extinction

#### 5.2 Special hazard arising from the substance or mixture

- Oxides of phosphorous, Hydrogen chloride gas, Potassium oxides, Sodium oxides

#### 5.3 Advice for firefighters

- Keep container(s) exposed to fire cool, by spraying with water
- 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

- Shut off all ignition sources
- Avoid raising and breathing dust, vapors, mist or gas, and provide adequate ventilation
- Remove contaminated clothing
- Wear protective clothing as per section 8
- Wash thoroughly after dealing with spillage

#### 6.2 Environmental Precautions

- Do not allow to enter public sewers and watercourses

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

- Absorb spillage in inert material and shovel up
- Place in sealable container
- Seal containers and label them
- Transfer to a chemical waste container for disposal in accordance with local regulations
- Ventilate the area and wash spill site after material pick-up is complete

#### 6.4 Reference to other sections

- For disposal see section 13.

### SECTION 7: Handling and storage

#### 7.1 Precautions for safe handling

- Avoid formation of dust and aerosols.
- Do not breathe dust, vapors, mist or gas.
- Avoid contact with skin and eyes
- Do not eat, drink or smoke when using this product.
- Ensure adequate ventilation
- Eyewash bottles should be available
- Wash hands thoroughly after using this substance

#### 7.2 Conditions for safe storage, including any incompatibilities





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## Base Measurement Media

according to Regulation  
(EC) No. 1272/2008  
Version 1.0  
Revision Date: 11-11-16

- Store at temperatures not exceeding 25°C/77°F. Keep cool.
- Keep container tightly closed.
- Store in accordance with information listed on the product insert.
- Store in a dry and well ventilated place.
- Storage class (TRGS 510): Non-combustible Solids.

### 7.3 Specific end use(s)

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

## 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

- Eyewash bottles should be available
- Engineering controls should be provided to prevent the need for ventilation
- No respiratory protection is needed if ventilation/extraction is adequate, otherwise wear approved dust mask, N95 (US) or type FFP1 (EN143) dust masks.
- Wear protective gloves. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and standard EN 374.
- Wear safety glasses approved to standard for NIOSH (US) or EN 166.
- Wear suitable protective clothing: Gloves, Safety glasses, Lab coat
- Do not take internally

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

- Physical States: Form - Solid
- Appearance: White
- pH: 7.2 - 7.6 at 25 °C
- Odor: No information available
- Melting point/Range: No information available
- Boiling Point/Range: Not determined
- Flashpoint: No information available
- Evaporation Rate: No information available
- Flammability: No information available
- Vapor Pressure: No information available
- Vapor Density: No information available



# SAFETY DATA SHEET

## Base Measurement Media

according to Regulation  
(EC) No. 1272/2008  
Version 1.0  
Revision Date: 11-11-16

- Specific Gravity: No information available
- Solubility in water: Insoluble in water
- Partition Coefficient (n-Octanol/Water): No information available
- Auto-ignition Temperature: Product is not self-igniting
- Viscosity: No information available
- Explosive Properties: No information available
- Oxidizing Properties: No information available

### 9.2 Other information

- No information available

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

- No information available

### 10.2 Chemical stability

- Stable if stored in accordance with information listed on the product insert.

### 10.3 Possibility of hazardous reactions

- No hazardous reactions known if used for its intended purpose

### 10.4 Conditions to avoid

- No data available

### 10.5 Incompatible materials

- Strong oxidizing agents, strong acids

### 10.6 Hazardous Decomposition Products

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

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

No data available

Dermal: No data available

#### Skin corrosion/ irritation

No data available

#### Serious eye damage/ eye irritation

No data available

#### Respiratory or skin sensitization



# SAFETY DATA SHEET

## Base Measurement Media

according to Regulation  
(EC) No. 1272/2008  
Version 1.0  
Revision Date: 11-11-16

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

### Additional information

RTECS: Not available

Vomiting, Diarrhoea, Dehydration and congestion may occur in internal organs. Hypertonic salt solutions can produce inflammatory reactions in the gastrointestinal tract. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## 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

- This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.



# SAFETY DATA SHEET

## Base Measurement Media

according to Regulation  
(EC) No. 1272/2008  
Version 1.0  
Revision Date: 11-11-16

### 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

### 14.8 Land transport (US DOT)

- DOT Proper Shipping Name: Not dangerous goods
- DOT Hazard Class:
- UN/NA:

### 14.9 Land transport (European ADR/RID)

- ADR/RID Shipping Name: Not dangerous goods.
- UN Number:
- Hazard Class:

### 14.11 Air transport (ICAO/IATA)

- ICAO/IATA Shipping Name: Not dangerous goods
- Additional transport information: Transport in accordance with local, state-, and federal regulations

## 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- 453/2010.



# SAFETY DATA SHEET

## Base Measurement Media

according to Regulation  
(EC) No. 1272/2008  
Version 1.0  
Revision Date: 11-11-16

### SECTION 16: Other information

Additional information about this product: no data available

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# SAFETY DATA SHEET

## L-Carnitine

according to Regulation  
(EC) No. 1907/2006  
Version 1.0  
Date: 11-11-2016

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

#### 1.1 Product identifier

Product Name: L-Carnitine Hydrochloride  
Product Part Number: MXC-504

#### 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: Hoffman Park, Inchera  
Little Island, Cork,  
T45 YX04  
Ireland  
Telephone: +353 (0)21 2428880  
Website: [www.luxcel.com](http://www.luxcel.com)  
Email: [info@luxcel.com](mailto: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)  
Not classified as hazardous for supply

#### 2.2 Label elements

#### 2.3 Other Hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

### SECTION 3: Composition/information on ingredients

#### 3.1 Substances

Synonyms: L-Carnitine Hydrochloride  
Vitamin BT  
Formula: (-)- $\beta$ -Hydroxy- $\gamma$ -(trimethylammonio)butyrate  
Molecular weight: :C<sub>7</sub>H<sub>15</sub>NO<sub>3</sub>.HCl  
CAS-No. : 197.66 g/mol  
EC-No. : 6645-46-1  
: 229-663-6

No components need to be disclosed according to the applicable regulations.

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

If inhaled



# SAFETY DATA SHEET

## L-Carnitine

according to Regulation  
(EC) No. 1907/2006  
Version 1.0  
Date: 11-11-2016

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

### **In case of skin contact**

Wash off with soap and plenty of water.

### **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**

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**

No data available

### **5.3 Advice for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary-

## **SECTION 6: Accidental release measures**

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

Avoid raising and breathing dust, vapors, mist or gas, and provide adequate ventilation  
For personal protection see section 8

### **6.2 Environmental Precautions**

No special environmental precautions required

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

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**

Provide appropriate exhaust ventilation at places where dust is formed.  
For precautions see section 2.2



# SAFETY DATA SHEET

## L-Carnitine

according to Regulation  
(EC) No. 1907/2006  
Version 1.0  
Date: 11-11-2016

### 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.

### 7.3 Specific end use(s)

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

## 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.

#### Personal protective equipment

##### Eye/face protection

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

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

##### Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. 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.





# SAFETY DATA SHEET

## L-Carnitine

according to Regulation  
(EC) No. 1907/2006  
Version 1.0  
Date: 11-11-2016

### SECTION 9: Physical and chemical properties

#### 9.1 Information on basic physical and chemical properties

a) Appearance:	Form: solid
b) Odour	No data available
c) Odour Threshold	No data available
d) pH	No data available
e) Melting point/freezing point	Melting point/range: 142°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: -0.975
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

Strong oxidizing agents.

#### 10.6 Hazardous Decomposition Products



# SAFETY DATA SHEET

## L-Carnitine

according to Regulation  
(EC) No. 1907/2006  
Version 1.0  
Date: 11-11-2016

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NOx),  
Hydrogen chloride gas  
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 Oral - Rat - 6,890 mg/kg

Remarks: Vascular other changes. Diarrhoea Skin and Appendages: Other: Hair.

##### Skin corrosion/irritation

No data available

##### Serious eye damage/eye irritation

No data available

##### Respiratory or skin sensitisation

No data available

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##### 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

Developmental Toxicity - Rat - Oral

Specific Developmental Abnormalities: Musculoskeletal system. Effects on Newborn: Behavioural.

##### 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: BP2979100

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



# SAFETY DATA SHEET

## L-Carnitine

according to Regulation  
(EC) No. 1907/2006  
Version 1.0  
Date: 11-11-2016

### 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

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

#### 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.

##### 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



# SAFETY DATA SHEET

## L-Carnitine

according to Regulation  
(EC) No. 1907/2006  
Version 1.0  
Date: 11-11-2016

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

#### Further information

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# SAFETY DATA SHEET

## FCCP

according to Regulation  
(EC) No. 1907/2006  
Version 1.0  
Date: 11-11-2016

### 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-505

#### 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](http://www.luxcel.com)  
E-mail: [info@luxcel.com](mailto: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)



# SAFETY DATA SHEET

## FCCP

according to Regulation  
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P280 Wear protective gloves.  
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<sub>10</sub>H<sub>5</sub>F<sub>3</sub>N<sub>4</sub>O  
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
<b>[[4-(Trifluoromethoxy)phenyl]hydrazono]malononitrile</b>		
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
<b>[[4-(Trifluoromethoxy)phenyl]hydrazono]malononitrile</b>		
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.



# SAFETY DATA SHEET

## FCCP

according to Regulation  
(EC) No. 1907/2006  
Version 1.0  
Date: 11-11-2016

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

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<sub>x</sub>), 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



# SAFETY DATA SHEET

## FCCP

according to Regulation  
(EC) No. 1907/2006  
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### 7.3 Specific end use(s)

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

## 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](mailto: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.





# SAFETY DATA SHEET

## FCCP

according to Regulation  
(EC) No. 1907/2006  
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### 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).

### 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 - dec
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.



# SAFETY DATA SHEET

## FCCP

according to Regulation  
(EC) No. 1907/2006  
Version 1.0  
Date: 11-11-2016

### 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



# SAFETY DATA SHEET

## FCCP

according to Regulation  
(EC) No. 1907/2006  
Version 1.0  
Date: 11-11-2016

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

### 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



# SAFETY DATA SHEET

## FCCP

according to Regulation  
(EC) No. 1907/2006  
Version 1.0  
Date: 11-11-2016

### 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.

## 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

## Etomoxir

according to Regulation  
(EC) No. 1907/2006  
Version 1.0  
Date: 11-11-2016

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

#### 1.1 Product identifier

Product Name: Etomoxir [(R)-(+)-Etomoxir sodium salt]  
Product Part Number: MXC-506

#### 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](http://www.luxcel.com)  
E-mail: [info@luxcel.com](mailto: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 [GHS/CLP]

Acute toxicity, Oral- Category 3

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

Toxic if swallowed

#### 2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram



Signal word Danger

Hazard statement(s)

H301 Toxic if swallowed.

Precautionary statement(s)

P264 Wash hands thoroughly after handling.

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

According to European Directive 67/548/EEC as amended

Hazard symbol(s):



R-phrase(s):



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R25 Toxic if swallowed  
S-phrase(s):  
S46 If swallowed, seek medical advice immediately and show this container or label  
Supplemental Hazard Statements none

2.3 Other hazards – none

### SECTION 3: Composition/information on ingredients

#### 3.1 Substances

Synonyms (R)-(+)-Etomoxir sodium salt  
Formula:  $C_{15}H_{18}ClNaO_4$   
Molecular Weight: 320.74 g/mol  
CAS-No.: 828934-41-4

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

##### General advice

Consult a doctor and show this safety data sheet.

##### If inhaled

Remove to fresh air and monitor breathing. If breathing becomes difficult, give oxygen. If breathing stops, give artificial respiration. Consult a doctor.

##### In case of skin contact

Immediately wash skin with copious amounts of soap and water for at least 15 minutes. Remove contaminated clothing and shoes and wash before reuse. Consult a doctor.

##### In case of eye contact

Flush with copious amounts of water for at least 15 minutes. Consult a doctor.

##### If swallowed

Rinse mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Consult a doctor.

#### 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

Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

### 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

In combustion, may emit toxic fumes.

#### 5.3 Advice for firefighters

Wear suitable protective clothing to prevent contact with skin and self-contained breathing apparatus.



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### SECTION 6: Accidental release measures

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

Do not take action without suitable protective clothing - see section 8 of SDS. Evacuate personnel to safe areas. Ensure adequate ventilation. Avoid breathing vapors, mist, dust or gas.

#### 6.2 Environmental precautions

Do not let product enter drains.

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

Cover spillage with suitable absorbent material. Using non-spark tools, sweep up material and place in an appropriate container. Decontaminate spill site with 10% caustic solution and ventilate area until after disposal is complete. Hold all material for appropriate disposal as described under section 13 of SDS.

#### 6.4 Reference to other sections

For required PPE see section 8. For disposal see section 13.

### SECTION 7: Handling and storage

#### 7.1 Precautions for safe handling

Use in a chemical fume hood, with air supplied by an independent system. Avoid inhalation, contact with eyes, skin and clothing. Avoid the formation of dust and aerosols. Use in a well-ventilated area. Keep away from sources of ignition. Avoid prolonged or repeated exposure.

#### 7.2 Conditions for safe storage, including any incompatibilities

Store in cool, well-ventilated place. Keep away from direct sunlight. Keep container tightly sealed until ready for use.

Recommended storage temperature: -20°C

#### 7.3 Specific end use(s)

Use in a laboratory fume hood where possible. Refer to employer's COSHH risk assessment.

### 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

Use in a fume hood where applicable. Ensure all engineering measures described under section 7 of SDS are in place. Ensure laboratory is equipped with a safety shower and eye wash station.

##### Personal protective equipment

###### Eye/face protection

Use appropriate safety glasses.

###### Skin protection

Use appropriate chemical resistant gloves (minimum requirement use standard BS EN 374:2003). Gloves should be inspected before use. Wash and dry hands thoroughly after handling.

###### Body protection



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Wear appropriate protective clothing.

### Respiratory protection

If risk assessment indicates necessary, use a suitable respirator.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

a) Appearance:	White solid
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	Soluble to 20mM in water and to 20mM in DMSO
o) Partition coefficient	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

Stable under recommended transport or storage conditions.

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

Hazardous reactions will not occur under normal transport or storage conditions. Decomposition may occur on exposure to conditions or materials listed below.

### 10.4 Conditions to avoid

Heat, moisture.

### 10.5 Incompatible materials

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





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### 10.6 Hazardous Decomposition Products

In combustion may emit toxic fumes. No known decomposition information.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

Data for Etomoxir: ORL-RAT - 250mg/kg

#### Skin corrosion/irritation

Classified based on available data

#### Serious eye damage/eye irritation

Classified based on available data

#### Respiratory or skin sensitisation

Classified based on available data

#### Germ cell mutagenicity

Classified based on available data

#### Carcinogenicity

Classified based on available data

#### Reproductive toxicity

Classified based on available data

#### Specific target organ toxicity - single exposure

Classified based on available data

#### Specific target organ toxicity - repeated exposure

Classified based on available data

#### Aspiration hazard

Classified based on available data

#### Symptoms/Routes of exposure

**Inhalation:** There may be shortness of breath with a burning sensation in the throat. Exposure may cause coughing or wheezing. Absorption through the lungs can occur causing symptoms similar to those of ingestion. Severe poisoning causes severe shortness of breath and shock, with blueness of the lips, tongue, ears, face, hands and feet.

**Ingestion:** There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur. Blood may be vomited. There may be vomiting and diarrhea. There may be loss of consciousness. Severe poisoning can cause unconsciousness and severe and persistent nausea and vomiting. Severe poisoning can cause shock, unconsciousness and convulsions.

**Skin:** Irritation or pain may occur at the site of contact. There may be redness or whiteness of the skin in the area of exposure. Absorption through the skin may be fatal.



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**Eyes:** There may be pain and redness. The vision may become blurred. The eyes may water profusely. Absorption through the eye may cause effects similar to skin and/or ingestion.

**Delayed / Immediate Effects:** Immediate effects can be expected after short-term exposure.

### Additional Information

RTECS No: RR0396000 (for Etomoxir)

Exposure may cause irritation of eyes, mucous membranes, upper respiratory tract and skin.

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

## 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

May be harmful to the aquatic environment.

## SECTION 13 Disposal considerations

### 13.1 Waste treatment methods

#### Product

Transfer to a suitable container and arrange for collection by specialized disposal company in accordance with National legislation.

#### Contaminated packaging

Dispose of in a regulated landfill site or other method for hazardous or toxic wastes in accordance with National legislation.

## 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 ((R)-(+)-Etomoxir sodium salt)

IMDG: TOXIC SOLID, ORGANIC, N.O.S. ((R)-(+)-Etomoxir sodium salt)

IATA: Toxic solid, organic, N.O.S. ((R)-(+)-Etomoxir sodium salt)



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### 14.3 Transport hazard class(es)

ADR/RID:- 6.1

IMDG:- 6.1

IATA:- 6.1

### 14.4 Packaging group

ADR/RID:- III

IMDG:- III

IATA:- III

### 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 Regulation (EC) No.453/2010.

### 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

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.