

## Kit SDS Cover Sheet OCP BULLETKIT (PT-8201 & PT-9501)

Version 2.0	Revision Date 30.06.202	1 Print Date 24.04.2024
Product Informatio	n	
Product name Material number	: OCP BULLETKIT (PT-8201 & PT-9501) : PT-8001	
Components		
MEM, Alpha, w/o	L-GIn	SDS attached
PT-9501 OCP Os	steoclast Precur. SingleQuot Kit	
	Fetal Bovine Serum	SDS attached
	L-GLUTAMINE	SDS attached
	Penicillin-Streptomycin 10K/10K	SDS attached
	M-CSF FOR OPDM KIT	SDS attached
	SOLUBLE RANK LIGAND	SDS attached

according to Work Health and Safety Regulations 2011



## MEM, Alpha, w/o L-GIn

Version 2.0	Revision Date 30.06.2021	Print Date 24.04.2024				
SECTION 1. PRODUCT AND COMPANY IDENTIFICATION						
Product name	: MEM, Alpha, w/o L-GIn					
Manufacturer or supplier's details						
Company	<ul> <li>Capsugel Australia Pty Ltd. Suite 610, 12 Century Circuit, Norwest NSW 2153, Australia</li> <li>Lonza Ltd Muenchensteinerstrasse 38 CH-4002 Basel, Switzerland</li> </ul>					
Telephone Telefax E-mail address	: Tel +61 3 9550 0883 : Tel +61 3 9550 0890 : sds@lonza.com					
Emergency telephone number	: +41 61 313 94 94 (24h)					
Recommended use of the chemica	al and restrictions on use					
Recommended use	: Scientific research and development					

#### **SECTION 2. HAZARDS IDENTIFICATION**

GHS Classification
Not a hazardous substance or mixture.
GHS label elements
Not a hazardous substance or mixture.
Other hazards which do not result in classification

No information available.

#### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture Hazardous components No hazardous ingredients

#### **SECTION 4. FIRST AID MEASURES**

If inhaled	: No special precautions required.	
In case of skin contact	: Wash with water and soap as a precaution. If skin irritation persists, call a physician.	
In case of eye contact	: Immediately flush eye(s) with plenty of water. If eye irritation persists, consult a specialist.	
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according to Work Health and Safety Regulations 2011



## MEM, Alpha, w/o L-GIn

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If swallowed	: Immediately give large quantities of v Do not induce vomiting without medic Never give anything by mouth to an u	al advice.	
Most important symptoms and effects, both acute and delayed	: No information available.		
Notes to physician	: No information available.		

#### SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	: Water spray Dry powder Foam	
Hazardous combustion products	: No hazardous combustion products are known	
Specific extinguishing methods	: Use water spray to cool unopened containers.	
Special protective equipment for firefighters	: In the event of fire, wear self-contained breathing apparatus.	

#### SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	: Use personal protective equipment.	
Environmental precautions	: Prevent product from entering drains.	
Methods and materials for containment and cleaning up	: Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).	

#### SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion	Ta	ke precautionary measures against static discharges.
Advice on safe handling	: No	special precautions required.
Hygiene measures		ndle in accordance with good industrial hygiene and safety actice.
Conditions for safe storage	: No	special storage conditions required.

according to Work Health and Safety Regulations 2011



## MEM, Alpha, w/o L-GIn

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SECTION 8. EXPOSURE CONTROLS	S/PERSONAL PROTECTION	
Components with workplace contains no substances with occurs	-	
Engineering measures	: Avoid splashes.	
Personal protective equipment Respiratory protection	: No personal respiratory protective required.	equipment normally
Hand protection Material Rate of permeability	<ul><li>Nitrile rubber</li><li>&gt; 480 min</li></ul>	
Eye protection	: Tightly fitting safety goggles	
Skin and body protection	: Choose body protection according concentration of the dangerous sub No special protective equipment re	ostance at the work place.

#### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

	Appearance	:	Aqueous solution
	Colour	:	light red
	Odour	:	no data available
	Odour Threshold	:	no data available
	рН	:	no data available
	Melting point/freezing point	:	no data available
	Initial boiling point and boiling range	:	no data available
	Flash point	:	no data available
	Evaporation rate	:	no data available
	Flammability (solid, gas)	:	no data available
	Flammability (liquids)	:	no data available
	Upper explosion limit / upper flammability limit	:	no data available
	Lower explosion limit / Lower	:	no data available
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according to Work Health and Safety Regulations 2011



## MEM, Alpha, w/o L-GIn

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flammability limit			
Vapour pressure	:	no data available	
Relative vapour density	:	no data available	
Relative density	:	no data available	
Density	:	no data available	
Water solubility	:	no data available	
Partition coefficient: n-octanol/water	:	no data available	
Auto-ignition temperature	:	no data available	
Decomposition temperature	:	no data available	
Viscosity, dynamic	:	no data available	
Viscosity, kinematic	:	no data available	

## SECTION 10. STABILITY AND REACTIVITY

Reactivity	: Stable under recommended storage conditions.	
Chemical stability	: Stable under normal conditions.	
Possibility of hazardous reactions	: Stable under normal conditions.	
Conditions to avoid	: no data available	
Incompatible materials	: Strong oxidizing agents	
Hazardous decomposition products	: No decomposition if stored normally.	

## SECTION 11. TOXICOLOGICAL INFORMATION

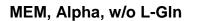
Acute toxicity	
Acute oral toxicity	: Remarks: no data available
Acute inhalation toxicity	: Remarks: no data available
Acute dermal toxicity	: Remarks: no data available

## Skin corrosion/irritation

Remarks: no data available

#### Serious eye damage/eye irritation

according to Work Health and Safety Regulations 2011



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Remarks: no data available		
Respiratory or skin sensitisation		
Remarks: no data available		
Germ cell mutagenicity		
Genotoxicity in vitro	: Remarks: no data available	
Carcinogenicity		
Remarks: no data available		
Reproductive toxicity		
Effects on fertility	: Remarks: no data available	
STOT - single exposure		
Remarks: no data available		
STOT - repeated exposure		
Remarks: no data available		
Further information		
Remarks: No data is available on the	e product itself.	
CTION 12. ECOLOGICAL INFORMA	ΓΙΟΝ	
Ecotoxicity		
Toxicity to fish	: Remarks: no data available	
Persistence and degradability		
Die de ave de bilitu	: Result: no data available	
Biodegradability		
Biodegradability Bioaccumulative potential		
<b>.</b>	: Remarks: no data available	
Bioaccumulative potential	: Remarks: no data available	
Bioaccumulative potential Bioaccumulation	<ul><li>Remarks: no data available</li><li>Remarks: no data available</li></ul>	
Bioaccumulative potential Bioaccumulation Mobility in soil Distribution among environmental		

Additional ecological information : no data available

#### SECTION 13. DISPOSAL CONSIDERATIONS



according to Work Health and Safety Regulations 2011



## MEM, Alpha, w/o L-GIn

Version 2.0	Revision Date 30.06.2021	Print Date 24.04.202
Disposal methods		
Waste from residues	: Dispose of in accordance with local reg	gulations.
SECTION 14. TRANSPORT INFORMATIC	N	
ΙΑΤΑ	Not dangerous goods	
UN number Proper shipping name Transport hazard class Packing group Environmental hazards	<ul> <li>Not applicable</li> <li>Not applicable</li> <li>Not applicable</li> <li>Not applicable</li> <li>no</li> </ul>	
IMDG	Not dangerous goods	
UN number Proper shipping name Transport hazard class Packing group Environmental hazards	<ul> <li>Not applicable</li> <li>Not applicable</li> <li>Not applicable</li> <li>Not applicable</li> <li>Not applicable</li> <li>Marine pollutant: no</li> </ul>	
ADR	: Not dangerous goods	
UN number Proper shipping name Transport hazard class Packing group Environmental hazards	<ul> <li>Not applicable</li> <li>Not applicable</li> <li>Not applicable</li> <li>Not applicable</li> <li>no</li> </ul>	
RID	Not dangerous goods	
UN number Proper shipping name Transport hazard class Packing group Environmental hazards	<ul> <li>Not applicable</li> <li>Not applicable</li> <li>Not applicable</li> <li>Not applicable</li> <li>no</li> </ul>	
Special precautions for user	: none	
Transport in bulk according to Annex II of MARPOL 73/78 and t	: Not applicable <b>he</b>	

#### **SECTION 15. REGULATORY INFORMATION**

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

Standard for the Uniform Scheduling of Medicines and Poisons Not applicable

**IBC Code** 

according to Work Health and Safety Regulations 2011



## MEM, Alpha, w/o L-GIn

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#### SECTION 16. OTHER INFORMATION

Revision Date : 30.06.2021

#### Full text of other abbreviations

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS -Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL -Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT -Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System Date format : dd.mm.vvvv

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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according to Work Health and Safety Regulations 2011



## Penicillin-Streptomycin 10K/10K

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SECTION 1. PRODUCT AND COMPANY IDENTIFICATION				
Product name	: Penicillin-Streptomycin 10K/10K			
Manufacturer or supplier's details	S			
Company	<ul> <li>Capsugel Australia Pty Ltd. Suite 610, 12 Century Circuit, Norwest NSW 2153, Australia</li> <li>Lonza Ltd Muenchensteinerstrasse 38</li> <li>Chi 4002 Reach, Switzerland</li> </ul>			
Telephone Telefax E-mail address	CH-4002 Basel, Switzerland : Tel +61 3 9550 0883 : Tel +61 3 9550 0890 : sds@lonza.com			
Emergency telephone number	: +41 61 313 94 94 (24h)			
Recommended use of the chemic Recommended use	cal and restrictions on use : For Research Use Only. Not for use ir	n diagnostic procedures.		

#### **SECTION 2. HAZARDS IDENTIFICATION**

#### GHS Classification

Not a hazardous substance or mixture.

#### **GHS label elements**

Not a hazardous substance or mixture.

#### Other hazards which do not result in classification

No information available.

#### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

: Mixture

#### Hazardous components

Chemical name	CAS-No.	Concentration (% w/w)
Streptomycin sulphate	3810-74-0	>= 1 - < 3
Penicillin-G potassium salt	113-98-4	>= 0,5 - < 1

#### **SECTION 4. FIRST AID MEASURES**

If inhaled

Move to fresh air. Call a physician immediately. If breathing is irregular or stopped, administer artificial respiration.

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according to Work Health and Safety Regulations 2011



## Penicillin-Streptomycin 10K/10K

Version 2.0	Revision Date 30.06.2021	Print Date 24.04.2024
In case of skin contact	: After contact with skin, wash immed and water. Take off all contaminated clothing in Call a physician immediately.	
In case of eye contact	: Immediately flush eye(s) with plenty Call a physician immediately.	of water.
If swallowed	: Immediately give plenty of water (if p Do not induce vomiting without med Never give anything by mouth to an Take victim immediately to hospital.	ical advice.
Most important symptoms and effects, both acute and delayed	: No information available.	
Notes to physician	: No information available.	

#### SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	/ater spray ry powder pam	
Hazardous combustion products	itrogen oxides (NOx) arbon oxides (Cox) ydrogen chloride (HCI) ulphur oxides (SOx)	
Specific extinguishing methods	se water spray to cool unope	ned containers.
Special protective equipment for firefighters	the event of fire, wear self-c	ontained breathing apparatus.

#### SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	: Use respirator when performing operations involving potential exposure to vapour of the product.
Environmental precautions	: Do not flush into surface water or sanitary sewer system.
Methods and materials for containment and cleaning up	: Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

#### SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and : Take precautionary measures against static discharges.

according to Work Health and Safety Regulations 2011



## Penicillin-Streptomycin 10K/10K

Version 2.0	Revision Date 30.06.2021	Print Date 24.04.2024
explosion		
Advice on safe handling	<ul> <li>In case of insufficient ventilation, wear surequipment.</li> <li>Avoid exposure - obtain special instruction</li> <li>Use only in area provided with appropriate</li> <li>Avoid contact with skin and eyes.</li> </ul>	ons before use.
Hygiene measures	: DANGER! Avoid contact with the skin and the eyes. Avoid breathing dust or spray mist. Wash hands before breaks and immedia product.	
Conditions for safe storage	: Keep tightly closed.	
Recommended storage temperature	: -20 - 37 °C	

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Components with workplace control parameters

Contains no substances with occupational exposure limit values.

Engineering measures	:	Provide sufficient air exchange and/or exhaust in work rooms.
Personal protective equipment		
Respiratory protection	:	In the case of vapour formation use a respirator with an approved filter.
Hand protection Material Rate of permeability	:	Nitrile rubber > 480 min
Eye protection	:	Tightly fitting safety goggles
Skin and body protection	:	Choose body protection according to the amount and concentration of the dangerous substance at the work place. Complete suit protecting against chemicals

#### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Aqueous solution	
Colour	: colourless, clear	
Odour	: odourless	
Odour Threshold	: no data available	

according to Work Health and Safety Regulations 2011



## Penicillin-Streptomycin 10K/10K

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рН	:	6,8 - 7,4	
Melting point/freezing point	:	ca. 0 °C	
Initial boiling point and boiling range	:	no data available	
Flash point	:	Not applicable	
Evaporation rate	:	no data available	
Flammability (solid, gas)	:	no data available	
Flammability (liquids)	:	no data available	
Upper explosion limit / upper	:	no data available	
flammability limit Lower explosion limit / Lower	:	no data available	
flammability limit Vapour pressure	:	no data available	
Relative vapour density	:	no data available	
Relative density	:	no data available	
Density	:	ca. 1 g/cm3	
Water solubility	:	soluble	
Partition coefficient: n-octanol/water	:	no data available	
Auto-ignition temperature	:	no data available	
Decomposition temperature	:	no data available	
Viscosity, dynamic	:	no data available	
Viscosity, kinematic	:	no data available	

#### SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	Stable under recommended storage conditions.
Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reactions	:	None known.
Conditions to avoid	:	None known.
Incompatible materials	:	None known.
Hazardous decomposition products	:	No decomposition if stored normally.

Penicillin-Streptomycin 10K/10K

according to Work Health and Safety Regulations 2011

## Lonza

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SECTION 11. TOXICOLOGICAL INFORMATION					
Acute toxicity					
Acute oral toxicity	: Acute toxicity estimate: > 2 000 mg/kg Method: Calculation method				
Further information					
Remarks: No data is available on the	product itself.				
Ecotoxicity Toxicity to fish	: Remarks: no data available				
Ecotoxicity					
Develotence and degradability					
Persistence and degradability					
Biodegradability	: Result: no data available				
	: Result: no data available				
Biodegradability	<ul><li>Result: no data available</li><li>Remarks: no data available</li></ul>				
Biodegradability Bioaccumulative potential					
Biodegradability Bioaccumulative potential Bioaccumulation	: Remarks: no data available				
Biodegradability Bioaccumulative potential Bioaccumulation Mobility in soil Distribution among environmental	: Remarks: no data available				

#### SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods		
Waste from residues	:	Dispose of in accordance with local regulations. Contact waste disposal services.
Contaminated packaging	:	Dispose of as unused product.

according to Work Health and Safety Regulations 2011

### Penicillin-Streptomycin 10K/10K

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Lonza

#### **SECTION 14. TRANSPORT INFORMATION**

ΙΑΤΑ			Not dangerous goods
	UN number Proper shipping name Transport hazard class Packing group Environmental hazards	:	Not applicable Not applicable Not applicable Not applicable no
IMDG			Not dangerous goods
	UN number Proper shipping name Transport hazard class Packing group Environmental hazards	: : : : : : : : : : : : : : : : : : : :	Not applicable Not applicable Not applicable Not applicable Marine pollutant: no
ADR		:	Not dangerous goods
	UN number Proper shipping name Transport hazard class Packing group Environmental hazards	: : : : : : : : : : : : : : : : : : : :	Not applicable Not applicable Not applicable Not applicable no
RID		:	Not dangerous goods
	UN number Proper shipping name Transport hazard class Packing group Environmental hazards	:	Not applicable Not applicable Not applicable Not applicable no
	Special precautions for user	:	none
	Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	:	Not applicable

#### **SECTION 15. REGULATORY INFORMATION**

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

#### Standard for the Uniform Scheduling of Medicines and Poisons

Not applicable

#### SECTION 16. OTHER INFORMATION

according to Work Health and Safety Regulations 2011



## Penicillin-Streptomycin 10K/10K

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#### Full text of other abbreviations

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS -Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL -Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT -Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System Date format : dd.mm.yyyy

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according to Work Health and Safety Regulations 2011



## **Fetal Bovine Serum**

Version 2.0	Revision Date 30.06.2021	Print Date 24.04.2024				
SECTION 1. PRODUCT AND COMPANY IDENTIFICATION						
Product name	: Fetal Bovine Serum					
Manufacturer or supplier's details						
Company	<ul> <li>Capsugel Australia Pty Ltd. Suite 610, 12 Century Circuit, Norwest NSW 2153, Australia</li> <li>Lonza Ltd Muenchensteinerstrasse 38</li> </ul>					
	CH-4002 Basel, Switzerland					
Telephone Telefax E-mail address	: Tel +61 3 9550 0883 : Tel +61 3 9550 0890 : sds@lonza.com					
Emergency telephone number	: +41 61 313 94 94 (24h)					
Recommended use of the chemica	al and restrictions on use					
Recommended use	: Scientific research and development					

### **SECTION 2. HAZARDS IDENTIFICATION**

GHS Classification
Not a hazardous substance or mixture.
GHS label elements
Not a hazardous substance or mixture.
Other hazards which do not result in classification

No information available.

#### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture Hazardous components No hazardous ingredients

### **SECTION 4. FIRST AID MEASURES**

If inhaled	: No special precautions required.	
In case of skin contact	: Wash with water and soap as a precaution. If skin irritation persists, call a physician.	
In case of eye contact	: Immediately flush eye(s) with plenty of water. If eye irritation persists, consult a specialist.	
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according to Work Health and Safety Regulations 2011



## Fetal Bovine Serum

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If swallowed	: Immediately give large quantities of Do not induce vomiting without med Never give anything by mouth to an	lical advice.
Most important symptoms and effects, both acute and delayed	: No information available.	
Notes to physician	: No information available.	

#### **SECTION 5. FIREFIGHTING MEASURES**

Suitable extinguishing media	: Water spray Dry powder Foam	
Hazardous combustion products	: No hazardous combustion products are known	
Specific extinguishing methods	: Use water spray to cool unopened containers.	
Special protective equipment for firefighters	: In the event of fire, wear self-contained breathing apparatus	3.

### SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	: Use personal protective equipment.
Environmental precautions	: Prevent product from entering drains.
Methods and materials for containment and cleaning up	: Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

#### SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion	:	No special precautions required.
Advice on safe handling	:	No special precautions required.
Hygiene measures	:	Handle in accordance with good industrial hygiene and safety practice.
Conditions for safe storage	:	Keep tightly closed.
		Store in cool place.

according to Work Health and Safety Regulations 2011



## Fetal Bovine Serum

Version 2.0	Revision Date 30.06.2021	Print Date 24.04.2024
SECTION 8. EXPOSURE CONTROL	S/PERSONAL PROTECTION	
Components with workplace of	control parameters	
Contains no substances with oc	cupational exposure limit values.	
Engineering measures	: Avoid splashes.	
Personal protective equipmen	t	
Respiratory protection	: No personal respiratory protective or required.	equipment normally
Hand protection		
Material Rate of permeability	: Nitrile rubber : > 480 min	
Eye protection	: Tightly fitting safety goggles	
Skin and body protection	: Choose body protection according concentration of the dangerous sub No special protective equipment re	ostance at the work place.

#### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

	Appearance	:	Aqueous solution
	Colour	:	brown
	Odour	:	no data available
	Odour Threshold	:	no data available
	рН	:	6,8 - 8,3
	Melting point/freezing point	:	no data available
	Initial boiling point and boiling range	:	no data available
	Flash point	:	no data available
	Evaporation rate	:	no data available
	Flammability (solid, gas)	:	no data available
	Flammability (liquids)	:	no data available
	Upper explosion limit / upper flammability limit	:	no data available
	Lower explosion limit / Lower	:	no data available
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according to Work Health and Safety Regulations 2011



## **Fetal Bovine Serum**

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flammability limit			
Vapour pressure	:	no data available	
Relative vapour density	:	no data available	
Relative density	:	no data available	
Density	:	no data available	
Water solubility	:	no data available	
Partition coefficient: n-octanol/water	:	no data available	
Auto-ignition temperature	:	no data available	
Decomposition temperature	:	no data available	
Viscosity, dynamic	:	no data available	
Viscosity, kinematic	:	no data available	

## SECTION 10. STABILITY AND REACTIVITY

Reactivity	Stable under r	ecommended storage conditions.
Chemical stability	Stable under r	normal conditions.
Possibility of hazardous reactions	Stable under r	normal conditions.
Conditions to avoid	no data availa	ble
Incompatible materials	Strong oxidizir	ng agents
Hazardous decomposition products	No decompos	ition if stored normally.

## SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity	
Acute oral toxicity	: Remarks: no data available
Acute inhalation toxicity	: Remarks: no data available
Acute dermal toxicity	: Remarks: no data available

## Skin corrosion/irritation

Remarks: no data available

#### Serious eye damage/eye irritation

according to Work Health and Safety Regulations 2011



## **Fetal Bovine Serum**

Version 2.0	Revision Date 30.06.2021	Print Date 24.04.2024
Remarks: no data available		
Respiratory or skin sensitisation		
Remarks: no data available		
Germ cell mutagenicity		
Genotoxicity in vitro	: Remarks: no data available	
Carcinogenicity		
Remarks: no data available		
Reproductive toxicity		
Effects on fertility	: Remarks: no data available	
STOT - single exposure		
Remarks: no data available		
STOT - repeated exposure		
Remarks: no data available		
Further information		
Remarks: No data is available on th	e product itself.	
SECTION 12. ECOLOGICAL INFORMA	TION	
Ecotoxicity		
Toxicity to fish	: Remarks: no data available	
Persistence and degradability		
Biodegradability	: Result: no data available	
Bioaccumulative potential		
Bioaccumulation	: Remarks: no data available	
Mobility in soil		
Distribution among environmental compartments	: Remarks: no data available	
Other adverse effects		
Additional ecological information	: no data available	

#### SECTION 13. DISPOSAL CONSIDERATIONS

according to Work Health and Safety Regulations 2011



## Fetal Bovine Serum

Version 2.0	Revision Date 30.06.2021	Print Date 24.04.2024
<b>Disposal methods</b> Waste from residues	: Dispose of in accordance with loca	l regulations.
SECTION 14. TRANSPORT INFO	RMATION	
ΙΑΤΑ	Not dangerous goods	

	UN number Proper shipping name Transport hazard class Packing group Environmental hazards	:	Not applicable Not applicable Not applicable Not applicable no
IMDG			Not dangerous goods
	UN number Proper shipping name Transport hazard class Packing group Environmental hazards	:	Not applicable Not applicable Not applicable Not applicable Marine pollutant: no
ADR		•	Not dangerous goods
	UN number Proper shipping name Transport hazard class Packing group Environmental hazards		Not applicable Not applicable Not applicable Not applicable no
RID		•	Not dangerous goods
	UN number Proper shipping name Transport hazard class Packing group Environmental hazards	: :	Not applicable Not applicable Not applicable Not applicable no
	Special precautions for user	:	none
	Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	:	Not applicable

#### **SECTION 15. REGULATORY INFORMATION**

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

Standard for the Uniform Scheduling of Medicines and Poisons Not applicable

according to Work Health and Safety Regulations 2011



## Fetal Bovine Serum

Version 2.0

Revision Date 30.06.2021

Print Date 24.04.2024

#### SECTION 16. OTHER INFORMATION

Revision Date : 30.06.2021

#### Full text of other abbreviations

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS -Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL -Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT -Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System Date format : dd.mm.yyyy

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according to Work Health and Safety Regulations 2011

## L-GLUTAMINE

Version 2.0	Revision Date 30.06.2021	Print Date 24.04.2024
SECTION 1. PRODUCT AND COMPANY I	DENTIFICATION	
Product name :	L-GLUTAMINE	
Manufacturer or supplier's details		
Company	: Capsugel Australia Pty Ltd. Suite 610, 12 Century Circuit, Norwest NSW 2153, Australia	
	Lonza Ltd Muenchensteinerstrasse 38 CH-4002 Basel, Switzerland	
Telephone	: Tel +61 3 9550 0883	
Telefax	: Tel +61 3 9550 0890	
E-mail address	: sds@lonza.com	
Emergency telephone number	: +41 61 313 94 94 (24h)	
Recommended use of the chemical	and restrictions on use	
Recommended use	: Scientific research and development	

### **SECTION 2. HAZARDS IDENTIFICATION**

**GHS Classification** Not a hazardous substance or mixture. **GHS** label elements Not a hazardous substance or mixture.

## Other hazards which do not result in classification

No information available.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture Hazardous components No hazardous ingredients

### **SECTION 4. FIRST AID MEASURES**

If inhaled	: No special precautions required.	
In case of skin contact	: Wash with water and soap as a precaution. If skin irritation persists, call a physician.	
In case of eye contact	: Immediately flush eye(s) with plenty of water. If eye irritation persists, consult a specialist.	
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according to Work Health and Safety Regulations 2011



## L-GLUTAMINE

Version 2.0	Revision Date 30.06.2021	Print Date 24.04.2024
If swallowed	: Immediately give large quantities of w Do not induce vomiting without medica Never give anything by mouth to an u	al advice.
Most important symptoms and effects, both acute and delayed	: No information available.	
Notes to physician	: No information available.	

#### SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	: Water spray Dry powder Foam	
Hazardous combustion products	: Nitrogen oxides (NOx) Carbon oxides (Cox)	
Specific extinguishing methods	: Use water spray to cool unopened containers.	
Special protective equipment for firefighters	: In the event of fire, wear self-contained breathing apparatus	s.

#### SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	: Use personal protective equipment.
Environmental precautions	: Prevent product from entering drains.
Methods and materials for containment and cleaning up	: Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

#### SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion	:	Take precautionary measures against static discharges.
Advice on safe handling	:	No special precautions required.
Hygiene measures	:	Handle in accordance with good industrial hygiene and safety practice.
Conditions for safe storage	:	No special storage conditions required.

according to Work Health and Safety Regulations 2011



## L-GLUTAMINE

Version 2.0	Revision Date 30.06.2021	Print Date 24.04.2024
SECTION 8. EXPOSURE CONTROL	S/PERSONAL PROTECTION	
Components with workplace c	-	
Contains no substances with occ	cupational exposure limit values.	
Engineering measures	: Avoid splashes.	
Personal protective equipment	t .	
Respiratory protection	: No personal respiratory protective e required.	equipment normally
Hand protection Material	: Nitrile rubber	
Rate of permeability	: > 480 min	
Eye protection	: Safety glasses	
Skin and body protection	: Choose body protection according the concentration of the dangerous sub No special protective equipment received by the special protective equipment protective equipment received by the special prote	stance at the work place.

#### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

	Appearance	:	Aqueous solution
	Colour	:	no data available
	Odour	:	no data available
	Odour Threshold	:	no data available
	рН	:	no data available
	Melting point/freezing point	:	no data available
	Initial boiling point and boiling range	:	no data available
	Flash point	:	no data available
	Evaporation rate	:	no data available
	Flammability (solid, gas)	:	no data available
	Flammability (liquids)	:	no data available
	Upper explosion limit / upper flammability limit	:	no data available
	Lower explosion limit / Lower	:	no data available
f	/ 00000028037		

according to Work Health and Safety Regulations 2011



## L-GLUTAMINE

Version 2.0		Revision Date 30.06.2021	Print Date 24.04.2024
flammability limit			
Vapour pressure	:	no data available	
Relative vapour density	:	no data available	
Relative density	:	no data available	
Density	:	no data available	
Water solubility	:	no data available	
Partition coefficient: n-octanol/water	:	no data available	
Auto-ignition temperature	:	no data available	
Decomposition temperature	:	no data available	
Viscosity, dynamic	:	no data available	
Viscosity, kinematic	:	no data available	

## SECTION 10. STABILITY AND REACTIVITY

:	Stable under recommended storage conditions.
:	Stable under normal conditions.
:	Stable under normal conditions.
:	no data available
:	Strong oxidizing agents
:	No decomposition if stored normally.
	· : :

## SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity	
Acute oral toxicity	: Remarks: no data available
Acute inhalation toxicity	: Remarks: no data available
Acute dermal toxicity	: Remarks: no data available

## Skin corrosion/irritation

Remarks: no data available

#### Serious eye damage/eye irritation

according to Work Health and Safety Regulations 2011

## L-GLUTAMINE

Revision Date 30.06.2021	Print Date 24.04.2024
: Remarks: no data available	
: Remarks: no data available	
e product itself.	
TION	
: Remarks: no data available	
: Result: no data available	
: Remarks: no data available	
	: Remarks: no data available ne product itself.

Other adverse effectsAdditional ecological information: no data available

#### SECTION 13. DISPOSAL CONSIDERATIONS



according to Work Health and Safety Regulations 2011



## L-GLUTAMINE

Version	2.0	Revision Date 30.06.2021	Print Date 24.04.202
Di	sposal methods		
Wa	aste from residues :	Dispose of in accordance with local	regulations.
SECTIO	ON 14. TRANSPORT INFORMATION		
ΙΑΤΑ		Not dangerous goods	
	UN number	: Not applicable	
	Proper shipping name	: Not applicable	
	Transport hazard class	: Not applicable	
	Packing group	: Not applicable	
	Environmental hazards	: no	
IMDG		Not dangerous goods	
	UN number	: Not applicable	
	Proper shipping name	: Not applicable	
	Transport hazard class	: Not applicable	
	Packing group	: Not applicable	
	Environmental hazards	: Marine pollutant: no	
ADR		: Not dangerous goods	
	UN number	: Not applicable	
	Proper shipping name	: Not applicable	
	Transport hazard class	: Not applicable	
	Packing group	: Not applicable	
	Environmental hazards	: no	
RID		: Not dangerous goods	
	UN number	: Not applicable	
	Proper shipping name	: Not applicable	
	Transport hazard class	: Not applicable	
	Packing group	: Not applicable	
	Environmental hazards	: no	
	Special precautions for user	: none	
	Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	: Not applicable	

## **SECTION 15. REGULATORY INFORMATION**

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

Standard for the Uniform Scheduling of Medicines and Poisons Not applicable

according to Work Health and Safety Regulations 2011

## L-GLUTAMINE

Version 2.0

Revision Date 30.06.2021

Print Date 24.04.2024

#### SECTION 16. OTHER INFORMATION

Revision Date : 30.06.2021

#### Full text of other abbreviations

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according to Work Health and Safety Regulations 2011

# Lonza

## **M-CSF FOR OPDM KIT**

Version 2.0	Revision Date 30.06.2021	Print Date 24.04.2024
SECTION 1. PRODUCT AND COMPANY	IDENTIFICATION	
Product name	: M-CSF FOR OPDM KIT	
Manufacturer or supplier's details		
Company	<ul> <li>Capsugel Australia Pty Ltd. Suite 610, 12 Century Circuit, Norwest NSW 2153, Australia</li> <li>Lonza Ltd Muenchensteinerstrasse 38 CH-4002 Basel, Switzerland</li> </ul>	
Telephone Telefax E-mail address	: Tel +61 3 9550 0883 : Tel +61 3 9550 0890 : sds@lonza.com	
Emergency telephone number	: +41 61 313 94 94 (24h)	
Recommended use of the chemica	l and restrictions on use	
Recommended use	: Scientific research and development	

### **SECTION 2. HAZARDS IDENTIFICATION**

GHS Classification
Not a hazardous substance or mixture.
GHS label elements
Not a hazardous substance or mixture.
Other hazards which do not result in classification

Other nazards which do not result in classifica

No information available.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture: MixtureHazardous componentsNo hazardous ingredients

### **SECTION 4. FIRST AID MEASURES**

If inhaled	: No special precautions required.	
In case of skin contact	: Wash with water and soap as a precaution. If skin irritation persists, call a physician.	
In case of eye contact	: Immediately flush eye(s) with plenty of water. If eye irritation persists, consult a specialist.	
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according to Work Health and Safety Regulations 2011

## Lonza

## M-CSF FOR OPDM KIT

Version 2.0	Revision Date 30.06.2021	Print Date 24.04.2024
If swallowed	: Immediately give large quantities of Do not induce vomiting without mee Never give anything by mouth to ar	dical advice.
Most important symptoms and effects, both acute and delayed	: No information available.	
Notes to physician	: No information available.	

#### SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	: Water spray Dry powder Foam	
Hazardous combustion products	: No hazardous combustion products are known	
Specific extinguishing methods	: Use water spray to cool unopened containers.	
Special protective equipment for firefighters	: In the event of fire, wear self-contained breathing apparatu	s.

#### SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	: Use personal protective equipment.
Environmental precautions	: Prevent product from entering drains.
Methods and materials for containment and cleaning up	: Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

#### SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion	Take precautionary measures against static discharges.	
Advice on safe handling	: No special precautions required.	
Hygiene measures	: Handle in accordance with good industrial hygiene and sa practice.	fety
Conditions for safe storage	: No special storage conditions required.	

according to Work Health and Safety Regulations 2011



## **M-CSF FOR OPDM KIT**

Version 2.0	Revision Date 30.06.2021	Print Date 24.04.2024
SECTION 8. EXPOSURE CONTROL	S/PERSONAL PROTECTION	
<b>Components with workplace c</b> Contains no substances with occ	-	
Engineering measures	: Avoid splashes.	
Personal protective equipment	t	
Respiratory protection	: No personal respiratory protective e required.	equipment normally
Hand protection Material Rate of permeability	: Nitrile rubber : > 480 min	
Eye protection	: Tightly fitting safety goggles	
Skin and body protection	: Choose body protection according concentration of the dangerous sub No special protective equipment re-	stance at the work place.

#### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

	Appearance	:	Aqueous solution
	Colour	:	no data available
	Odour	:	no data available
	Odour Threshold	:	no data available
	рН	:	no data available
	Melting point/freezing point	:	no data available
	Initial boiling point and boiling range	:	no data available
	Flash point	:	no data available
	Evaporation rate	:	no data available
	Flammability (solid, gas)	:	no data available
	Flammability (liquids)	:	no data available
	Upper explosion limit / upper flammability limit	:	no data available
	Lower explosion limit / Lower	:	no data available
4	10000000000		

according to Work Health and Safety Regulations 2011



## **M-CSF FOR OPDM KIT**

Version 2.0		Revision Date 30.06.2021	Print Date 24.04.2024
flammability limit			
Vapour pressure	:	no data available	
Relative vapour density	:	no data available	
Relative density	:	no data available	
Density	:	no data available	
Water solubility	:	no data available	
Partition coefficient: n-octanol/water	:	no data available	
Auto-ignition temperature	:	no data available	
Decomposition temperature	:	no data available	
Viscosity, dynamic	:	no data available	
Viscosity, kinematic	:	no data available	

## SECTION 10. STABILITY AND REACTIVITY

:	Stable under recommended storage conditions.
:	Stable under normal conditions.
:	Stable under normal conditions.
:	no data available
:	Strong oxidizing agents
:	No decomposition if stored normally.
	· : :

## SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity	
Acute oral toxicity	: Remarks: no data available
Acute inhalation toxicity	: Remarks: no data available
Acute dermal toxicity	: Remarks: no data available

## Skin corrosion/irritation

Remarks: no data available

#### Serious eye damage/eye irritation

according to Work Health and Safety Regulations 2011

## **M-CSF FOR OPDM KIT**

sion 2.0	Revision Date 30.06.2021	Print Date 24.04.202
Remarks: no data available		
Respiratory or skin sensitisation		
Remarks: no data available		
Germ cell mutagenicity		
Genotoxicity in vitro	: Remarks: no data available	
Carcinogenicity		
Remarks: no data available		
Reproductive toxicity		
Effects on fertility	: Remarks: no data available	
STOT - single exposure		
Remarks: no data available		
STOT - repeated exposure		
Remarks: no data available		
Further information		
Remarks: No data is available on the	e product itself.	
<b>ECOLOGICAL INFORMA</b> <b>Ecotoxicity</b> Toxicity to fish	<b>FION</b> : Remarks: no data available	
Desciption of the second state		
Persistence and degradability Biodegradability	: Result: no data available	
Bioaccumulative potential Bioaccumulation	: Remarks: no data available	
Mobility in soil	. Domotiou no doto ovollable	
Distribution among environmental	: Remarks: no data available	

**SECTION 13. DISPOSAL CONSIDERATIONS** 

Additional ecological information

compartments

Other adverse effects

: no data available



according to Work Health and Safety Regulations 2011

## M-CSF FOR OPDM KIT

Version	12.0	Revision Date 30.06.2021	Print Date 24.04.202
Di	sposal methods		
Wa	aste from residues :	Dispose of in accordance with local r	egulations.
SECTIO	ON 14. TRANSPORT INFORMATION	l	
ΙΑΤΑ		Not dangerous goods	
	UN number	: Not applicable	
	Proper shipping name	: Not applicable	
	Transport hazard class	: Not applicable	
	Packing group	: Not applicable	
	Environmental hazards	: no	
IMDG		Not dangerous goods	
	UN number	: Not applicable	
	Proper shipping name	: Not applicable	
	Transport hazard class	: Not applicable	
	Packing group	: Not applicable	
	Environmental hazards	: Marine pollutant: no	
ADR		: Not dangerous goods	
	UN number	: Not applicable	
	Proper shipping name	: Not applicable	
	Transport hazard class	: Not applicable	
	Packing group	: Not applicable	
	Environmental hazards	: no	
RID		: Not dangerous goods	
	UN number	: Not applicable	
	Proper shipping name	: Not applicable	
	Transport hazard class	: Not applicable	
	Packing group Environmental hazards	: Not applicable : no	
	Special precautions for user	: none	
	Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	: Not applicable e	

## SECTION 15. REGULATORY INFORMATION

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

Standard for the Uniform Scheduling of Medicines and Poisons Not applicable



according to Work Health and Safety Regulations 2011



## M-CSF FOR OPDM KIT

Version 2.0

Revision Date 30.06.2021

Print Date 24.04.2024

#### SECTION 16. OTHER INFORMATION

Revision Date : 30.06.2021

#### Full text of other abbreviations

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according to Work Health and Safety Regulations 2011

## Lonza

## SOLUBLE RANK LIGAND

Version 2.0	Revision Date 30.06.2021	Print Date 24.04.2024
SECTION 1. PRODUCT AND COMPANY I	DENTIFICATION	
Product name :	SOLUBLE RANK LIGAND	
Manufacturer or supplier's details		
Company	<ul> <li>Capsugel Australia Pty Ltd. Suite 610, 12 Century Circuit, Norwest NSW 2153, Australia</li> <li>Lonza Ltd Muenchensteinerstrasse 38 CH-4002 Basel, Switzerland</li> </ul>	
Telephone Telefax E-mail address	<ul> <li>Tel +61 3 9550 0883</li> <li>Tel +61 3 9550 0890</li> <li>sds@lonza.com</li> </ul>	
Emergency telephone number	: +41 61 313 94 94 (24h)	
Recommended use of the chemical	and restrictions on use	
Recommended use	: Scientific research and development	

### **SECTION 2. HAZARDS IDENTIFICATION**

**GHS Classification** Not a hazardous substance or mixture.

#### **GHS** label elements

Not a hazardous substance or mixture.

#### Other hazards which do not result in classification

May form combustible dust concentrations in air.

#### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture Hazardous components No hazardous ingredients

### **SECTION 4. FIRST AID MEASURES**

If inhaled	: No special precautions required.	
In case of skin contact	: After contact with skin, wash immediately with and water. If skin irritation persists, call a physician.	plenty of soap
In case of eye contact	: Immediately flush eye(s) with plenty of water.	
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	If eye irritation persists, consult a sp	pecialist.
If swallowed	: If swallowed, do not induce vomiting Immediately give large quantities of Never give anything by mouth to an	water to drink.
Most important symptoms and effects, both acute and delayed	: No information available.	
Notes to physician	: No information available.	

#### **SECTION 5. FIREFIGHTING MEASURES**

Suitable extinguishing media	: Dry powder Water spray Foam
Hazardous combustion products	<ul> <li>Nitrogen oxides (NOx)</li> <li>Sodium oxides</li> <li>Carbon oxides (Cox)</li> <li>Hydrogen chloride (HCI)</li> <li>Sulphur oxides (SOx)</li> </ul>
Specific extinguishing methods	: Use water spray to cool unopened containers.
Special protective equipment for firefighters	: In the event of fire, wear self-contained breathing apparatus.

#### SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	: Use personal protective equipment. Avoid dust formation.
Environmental precautions	: Prevent product from entering drains.
Methods and materials for containment and cleaning up	<ul> <li>Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Non-sparking tools should be used.</li> </ul>

#### SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion	:	Avoid dust formation. During processing, dust may form explosive mixture in air.
Advice on safe handling	:	Minimize dust generation and accumulation. Routine housekeeping should be instituted to ensure that dusts



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	do not accumulate on surfaces. Dry powders can build static electric to the friction of transfer and mixing Provide adequate precautions, such and bonding, or inert atmospheres.	operations. h as electrical grounding
Hygiene measures	: Handle in accordance with good incorpractice.	dustrial hygiene and safety
Conditions for safe storage	: No special storage conditions requi	red.

#### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Components with workplace control parameters

Contains no substances with occupational exposure limit values.

Engineering measures	:	It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen deficient environment. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment). Use only appropriately classified electrical equipment and powered industrial trucks.
Personal protective equipment Respiratory protection	:	Respirator must be worn if exposed to dust.
Hand protection Material Rate of permeability	:	Nitrile rubber > 480 min
Eye protection	:	Safety glasses with side-shields
Skin and body protection	:	No special protective equipment required.

#### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	powder
Colour	:	no data available
Odour	:	no data available
Odour Threshold	:	no data available

according to Work Health and Safety Regulations 2011

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рН	:	Not applicable	
Melting point/freezing point	:	no data available	
Initial boiling point and boiling range	:	no data available	
Flash point	:	Not applicable	
Evaporation rate	:	no data available	
Flammability (solid, gas)	:	no data available	
Flammability (liquids)	:	no data available	
Upper explosion limit / upper flammability limit	:	Not applicable	
Lower explosion limit / Lower flammability limit	:	Not applicable	
Vapour pressure	:	no data available	
Relative vapour density	:	Not applicable	
Relative density	:	no data available	
Density	:	no data available	
Water solubility	:	no data available	
Partition coefficient: n-octanol/water	:	no data available	
Auto-ignition temperature	:	Not applicable	
Decomposition temperature	:	no data available	
Viscosity, dynamic	:	no data available	
Viscosity, kinematic	:	Not applicable	

## SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	Stable under recommended storage conditions.
Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reactions	:	Stable under normal conditions.
Conditions to avoid	:	no data available
Incompatible materials	:	Strong oxidizing agents
Hazardous decomposition products	:	No decomposition if stored normally.

according to Work Health and Safety Regulations 2011

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ECTION 11. TOXICOLOGICAL INFOR	MATION	
Acute toxicity		
Acute oral toxicity	: Remarks: no data available	
Acute inhalation toxicity	: Remarks: no data available	
Acute dermal toxicity	: Remarks: no data available	
Skin corrosion/irritation Remarks: no data available		
Serious eye damage/eye irritatior Remarks: no data available		
<b>Respiratory or skin sensitisation</b> Remarks: no data available		
Germ cell mutagenicity		
Genotoxicity in vitro	: Remarks: no data available	
<b>Carcinogenicity</b> Remarks: no data available		
Reproductive toxicity Effects on fertility	: Remarks: no data available	
Encote on forting		
STOT - single exposure		
Remarks: no data available		
STOT - repeated exposure		
Remarks: no data available		
Further information		
Remarks: No data is available on th	e product itself.	
SECTION 12. ECOLOGICAL INFORMA	TION	
Ecotoxicity		
Toxicity to fish	: Remarks: no data available	
Persistence and degradability		
Biodegradability	: Result: no data available	
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4. TRANSPORT INFORMAT	ION		
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		Not dangerous goods	
number		: Not applicable	
oper shipping name		: Not applicable	
vironmental hazards		: Marine pollutant: no	
		: Not dangerous goods	
number		: Not applicable	
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RID	: Not dangerous goods	
UN number Proper shipping name Transport hazard class Packing group Environmental hazards	<ul> <li>Not applicable</li> <li>Not applicable</li> <li>Not applicable</li> <li>Not applicable</li> <li>no</li> </ul>	
Special precautions for user	: none	
Transport in bulk according to Annex II of MARPOL 73/78 and IBC Code		

#### **SECTION 15. REGULATORY INFORMATION**

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

Standard for the Uniform Scheduling of Medicines and Poisons Not applicable

#### SECTION 16. OTHER INFORMATION

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#### Full text of other abbreviations

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant: DIN - Standard of the German Institute for Standardisation: DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS -Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL -Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT -Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical

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Substance Invent	ory: TDG - Transportation of Dangerous Goods: TECI -	Thailand Existing Chemicals

Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System Date format : dd.mm.yyyy

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