

Creation Date 13-Jul-2012 Revision Date 10-Dec-2021 Revision Number 3

# SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product Description: <u>LISTERIA Selective Enrichment Supplement</u>

Cat No.: SR0149

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

Recommended Use Laboratory chemicals. Uses advised against No Information available

1.3. Details of the supplier of the safety data sheet

CompanyOxoid LtdThermo Fisher ScientificWade Road20 Dalgleish Street

Basingstoke, Hants, UK

RG24 8PW

Adelaide

Tel: +44 (0) 1256 841144 South Australia 5031

AUSTRALIA

**EU entity/business name** Tel: 61 8 8238 9050 or 1800 33 11 63 (Toll

Oxoid Deutschland GmbH Free)
Postfach 10 07 53 Fax: 61 8 8238 9060 or 1800 00 70 54 (Toll

D-46483 Free).

Wesel GERMANY Tel: + 49 (0) 281 1520

Fax: 49 (0) 281 1521

E-mail address mbd-sds@thermofisher.com

1.4. Emergency telephone number

1800 331 163

## **SECTION 2: HAZARDS IDENTIFICATION**

## 2.1. Classification of the substance or mixture

#### CLP Classification - Regulation (EC) No 1272/2008

### **Physical hazards**

Based on available data, the classification criteria are not met

## **Health hazards**

Acute oral toxicityCategory 2 (H300)Serious Eye Damage/Eye IrritationCategory 1 (H318)Respiratory SensitizationCategory 1 (H334)

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Category 1 (H317) Category 2 (H341)

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Category 1B (H360D)

**Environmental hazards** 

Germ Cell Mutagenicity

Reproductive Toxicity

Skin Sensitization

Category 2 (H411) Chronic aquatic toxicity

Full text of Hazard Statements: see section 16

#### 2.2. Label elements



#### Signal Word

**Danger** 

#### **Hazard Statements**

H300 - Fatal if swallowed

H317 - May cause an allergic skin reaction

H318 - Causes serious eye damage

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled

H341 - Suspected of causing genetic defects

H360D - May damage the unborn child

H411 - Toxic to aquatic life with long lasting effects

#### **Precautionary Statements**

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

P330 - Rinse mouth

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P342 + P311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician

P308 + P313 - IF exposed or concerned: Get medical advice/attention

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing

#### Additional EU labelling

Restricted to professional users

#### 2.3. Other hazards

## **SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

#### 3.2. Mixtures

Component	CAS No	EC No	Weight %	CLP Classification - Regulation (EC) No 1272/2008
Cycloheximide	66-81-9	EEC No. 200-636-0	16.95	Acute Tox. 2 (H300)

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				Muta. 2 (H341) Repr. 1B (H360D) Aquatic Chronic 2 (H411)
Nalidixic acid sodium salt	3374-05-8	EEC No. 222-159-7	12.2	Resp. Sens. 1 (H334) Skin Sens. 1 (H317)
Acriflavin Neutral	8048-52-0		3.05	STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Acute Tox. 4 (H302)

Full text of Hazard Statements: see section 16

## **SECTION 4: FIRST AID MEASURES**

## 4.1. Description of first aid measures

**Eye Contact** Immediately flush with plenty of water. After initial flushing, remove any contact lenses and

continue flushing for at least 15 minutes. Get medical attention immediately if symptoms

occur.

**Skin Contact** Wash off immediately with plenty of water for at least 15 minutes. Remove and wash

contaminated clothing and gloves, including the inside, before re-use. Get medical attention

immediately if symptoms occur.

**Ingestion** Clean mouth with water and drink afterwards plenty of water. Do not induce vomiting

without medical advice. Immediate medical attention is required.

**Inhalation** Remove to fresh air. Get medical attention immediately if symptoms occur. Oxygen or

artificial respiration if needed.

Self-Protection of the First Aider Ensure that medical personnel are aware of the material(s) involved, take precautions to

protect themselves and prevent spread of contamination.

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

Causes eye burns. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause allergic skin reaction. . Symptoms of allergic reaction may include rash,

itching, swelling, trouble breathing, tingling of the hands and feet, dizziness,

lightheadedness, chest pain, muscle pain or flushing

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

Notes to Physician May cause sensitization of susceptible persons. Use of epinephrine may be indicated.

## **SECTION 5: FIREFIGHTING MEASURES**

## 5.1. Extinguishing media

#### **Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam.

#### Extinguishing media which must not be used for safety reasons

No information available.

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#### 5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors.

#### **Hazardous Combustion Products**

Nitrogen oxides (NOx), Carbon oxides.

#### 5.3. Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

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

Avoid dust formation. Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

#### 6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system.

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

Sweep up and remove immediately. Keep in suitable, closed containers for disposal. Clean contaminated surface thoroughly.

#### 6.4. Reference to other sections

Refer to protective measures listed in Sections 8 and 13.

## **SECTION 7: HANDLING AND STORAGE**

## 7.1. Precautions for safe handling

Use only under a chemical fume hood. Do not breathe dust. Avoid contact with skin, eyes or clothing.

#### **Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice. Wash hands with water as a precaution.

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

Keep container tightly closed. Keep at temperatures between 2° and 8 °C.

Technical Rules for Hazardous Substances (TRGS) 510 Class 6.1B Storage Class (LGK) (Germany)

#### 7.3. Specific end use(s)

Use in laboratories

## **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

## 8.1. Control parameters

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#### **Exposure limits**

Contains no substances with occupational exposure limit values However it is the duty of the user to verify this and follow given exposure limits at the workplace

#### **Biological limit values**

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

#### Derived No Effect Level (DNEL) / Derived Minimum Effect Level (DMEL)

No information available

#### **Predicted No Effect Concentration (PNEC)**

No information available.

#### 8.2. Exposure controls

### **Engineering Measures**

Use only under a chemical fume hood. Handle only in a place equipped with local exhaust (or other appropriate exhaust). Ensure that eyewash stations and safety showers are close to the workstation location.

Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source

### Personal protective equipment

**Eye Protection** Goggles (European standard - EN 166)

Hand Protection Protective gloves

Glove material	Breakthrough time	Glove thickness	EU standard	Glove comments
Disposable gloves	See manufacturers	-	EN 374	(minimum requirement)
	recommendations			

Skin and body protection Long sleeved clothing.

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

**Respiratory Protection** When workers are facing concentrations above the exposure limit they must use

appropriate certified respirators.

To protect the wearer, respiratory protective equipment must be the correct fit and be used

and maintained properly

Large scale/emergency use In case of insufficient ventilation, wear suitable respiratory equipment

Small scale/Laboratory use Use a NIOSH/MSHA or European Standard EN 149:2001 approved respirator if exposure

limits are exceeded or if irritation or other symptoms are experienced.

When RPE is used a face piece Fit Test should be conducted

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**Environmental exposure controls** 

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Prevent product from entering drains. Do not allow material to contaminate ground water

system.

## **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

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

**Physical State** Lyophilized Pellets Solid

**Appearance** Yellow-orange

No information available Odor No data available **Odor Threshold** Melting Point/Range No data available **Softening Point** No data available **Boiling Point/Range** Not applicable

Not applicable Flammability (liquid) Solid

Flammability (solid, gas) No information available

**Explosion Limits** No data available

**Flash Point** Not applicable Method - No information available

**Autoignition Temperature** No data available **Decomposition Temperature** No data available pН Not applicable

Not applicable Solid Viscosity

Soluble in water **Water Solubility** 

Solubility in other solvents No information available

Partition Coefficient (n-octanol/water)

Component log Pow Cycloheximide

**Vapor Pressure** No data available Density / Specific Gravity No data available **Bulk Density** No data available

**Vapor Density** Not applicable Solid

No data available Particle characteristics

9.2. Other information

**Evaporation Rate** Not applicable - Solid

## SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity None known, based on information available

10.2. Chemical stability

Stable under normal conditions. Stable up to 100°C.

10.3. Possibility of hazardous reactions

**Hazardous Polymerization** Hazardous polymerization does not occur.

**Hazardous Reactions** None under normal processing.

10.4. Conditions to avoid

Avoid dust formation.

10.5. Incompatible materials

Strong oxidizing agents. Bases.

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#### 10.6. Hazardous decomposition products

Nitrogen oxides (NOx). Carbon oxides.

## **SECTION 11: TOXICOLOGICAL INFORMATION**

#### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### **Product Information**

(a) acute toxicity:

Category 2 Oral No data available **Dermal** No data available Inhalation

## Toxicology data for the components

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation		
Cycloheximide	LD50 = 2 mg/kg (Rat)	-	-		

(b) skin corrosion/irritation; No data available

(c) serious eye damage/irritation; Category 1

(d) respiratory or skin sensitization;

Category 1 Respiratory Skin Category 1

May cause sensitization by inhalation and skin contact

(e) germ cell mutagenicity; Category 2

Mutagenic effects have occurred in humans

(f) carcinogenicity; No data available

There are no known carcinogenic chemicals in this product

(g) reproductive toxicity; Category 1B

**Developmental Effects** May cause harm to the unborn child.

No data available (h) STOT-single exposure;

No data available (i) STOT-repeated exposure;

No information available. **Target Organs** 

(j) aspiration hazard; Not applicable

Solid

delayed

Symptoms / effects, both acute and Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing.

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#### 11.2. Information on other hazards

**Endocrine Disrupting Properties** 

Assess endocrine disrupting properties for human health. This product does not contain any known or suspected endocrine disruptors.

#### SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

**Ecotoxicity effects** Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic

environment. The product contains following substances which are hazardous for the

environment.

## 12.2. Persistence and degradability

**Persistence** 

Soluble in water, Persistence is unlikely, based on information available.

Degradation in sewage treatment plant

Contains substances known to be hazardous to the environment or not degradable in waste

water treatment plants.

#### 12.3. Bioaccumulative potential Bioaccumulation is unlikely

Component	log Pow	Bioconcentration factor (BCF)		
Cycloheximide	0.55	No data available		

The product is water soluble, and may spread in water systems . Will likely be mobile in the 12.4. Mobility in soil

environment due to its water solubility. Highly mobile in soils

12.5. Results of PBT and vPvB

assessment

No data available for assessment.

12.6. Endocrine disrupting

properties

**Endocrine Disruptor Information** This product does not contain any known or suspected endocrine disruptors

12.7. Other adverse effects

**Persistent Organic Pollutant Ozone Depletion Potential** 

This product does not contain any known or suspected substance This product does not contain any known or suspected substance

## **SECTION 13: DISPOSAL CONSIDERATIONS**

#### 13.1. Waste treatment methods

Waste from Residues/Unused

**Products** 

Dispose of in accordance with federal, state and local regulations. Waste is classified as hazardous. Dispose of in accordance with the European Directives on waste and

hazardous waste. Dispose of in accordance with local regulations.

**Contaminated Packaging** Dispose of in accordance with federal, state, and local regulations. Dispose of this container

to hazardous or special waste collection point.

**European Waste Catalogue (EWC)** According to the European Waste Catalog, Waste Codes are not product specific, but

application specific.

Do not flush to sewer. Waste codes should be assigned by the user based on the Other Information

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application for which the product was used. Do not empty into drains. Do not let this chemical enter the environment.

## **SECTION 14: TRANSPORT INFORMATION**

#### IMDG/IMO

**14.1. UN number** UN2811

**14.2. UN proper shipping name** Toxic solid, organic, n.o.s. (Cycloheximide mixture)

14.3. Transport hazard class(es) 6.1 14.4. Packing group II

ADR

**14.1. UN number** UN2811

14.2. UN proper shipping name Toxic solid, organic, n.o.s. (Cycloheximide mixture)

**14.3. Transport hazard class(es)** 6.1 **14.4. Packing group** II

IATA

**14.1. UN number** UN2811

**14.2. UN proper shipping name** Toxic solid, organic, n.o.s. (Cycloheximide mixture)

14.3. Transport hazard class(es) 6.1 14.4. Packing group II

**14.5. Environmental hazards** Dangerous for the environment

Product is a marine pollutant according to the criteria set by IMDG/IMO

14.6. Special precautions for user No special precautions required

14.7. Maritime transport in bulk according to IMO instruments

Not applicable, packaged goods

## **SECTION 15: REGULATORY INFORMATION**

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

## **International Inventories**

Europe (EINECS/ELINCS/NLP), China (IECSC), Taiwan (TCSI), Korea (KECL), Japan (ENCS), Japan (ISHL), Canada (DSL/NDSL), Australia (AICS), New Zealand (NZIoC), Philippines (PICCS). US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

Component	CAS No	EINECS	ELINCS	NLP	IECSC	TCSI	KECL	ENCS	ISHL
Cycloheximide	66-81-9	200-636-0	-	-	Х	X	KE-11716	X	Х
Nalidixic acid sodium salt	3374-05-8	222-159-7	-	-	Х	X	-	-	-
Acriflavin Neutral	8048-52-0	-	-	-	-	X	-	-	-

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	DSL	NDSL	AICS	NZIoC	PICCS
Cycloheximide	66-81-9	-	-	-	-	Х	Х	Х
Nalidixic acid sodium salt	3374-05-8	-	=	-	-	-	Х	-
Acriflavin Neutral	8048-52-0	-	=	-	-	Х	Х	Х

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Legend: X - Listed '-' - Not Listed KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

Authorisation/Restrictions according to EU REACH

#### REACH (1907/2006) - Annex XIV -REACH (1907/2006) - Annex XVII -**REACH Regulation (EC** Component **Substances Subject to Restrictions on Certain Dangerous** 1907/2006) article 59 - Candidate Authorization **Substances** List of Substances of Very High Concern (SVHC) Cycloheximide Use restricted. See item 30. (see link for restriction details) Use restricted. See item 75. (see link for restriction details)

https://echa.europa.eu/substances-restricted-under-reach

Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements
Cycloheximide	66-81-9	Not applicable	Not applicable
Nalidixic acid sodium salt	3374-05-8	Not applicable	Not applicable
Acriflavin Neutral	8048-52-0	Not applicable	Not applicable

# Regulation (EC) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of dangerous chemicals

Not applicable

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Take note of Directive 94/33/EC on the protection of young people at work

Take note of Dir 92/85/EC on the protection of pregnant and breastfeeding women at work

### **National Regulations**

UK - Take note of Control of Substances Hazardous to Health Regulations (COSHH) 2002 and 2005 Amendment

WGK Classification

Water endangering class = 3 (self classification)

Component	Germany - Water Classification (VwVwS)	Germany - TA-Luft Class
Cycloheximide	WGK3	

## 15.2. Chemical safety assessment

Chemical Safety Assessment/Reports (CSA/CSR) are not required for mixtures

## **SECTION 16: OTHER INFORMATION**

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

H300 - Fatal if swallowed

H317 - May cause an allergic skin reaction

H318 - Causes serious eye damage

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled

H341 - Suspected of causing genetic defects

H360D - May damage the unborn child

H410 - Very toxic to aquatic life with long lasting effects

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H411 - Toxic to aquatic life with long lasting effects

H302 - Harmful if swallowed H315 - Causes skin irritation

H335 - May cause respiratory irritation

H400 - Very toxic to aquatic life

#### Legend

**CAS** - Chemical Abstracts Service

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical

Substances/EU List of Notified Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

IECSC - Chinese Inventory of Existing Chemical Substances **KECL** - Korean Existing and Evaluated Chemical Substances DSL/NDSL - Canadian Domestic Substances List/Non-Domestic

Substances List

**ENCS** - Japanese Existing and New Chemical Substances

AICS - Australian Inventory of Chemical Substances NZIoC - New Zealand Inventory of Chemicals

WEL - Workplace Exposure Limit

**ACGIH** - American Conference of Governmental Industrial Hygienists

**DNEL** - Derived No Effect Level

RPE - Respiratory Protective Equipment LC50 - Lethal Concentration 50% NOEC - No Observed Effect Concentration PBT - Persistent, Bioaccumulative, Toxic

TWA - Time Weighted Average

IARC - International Agency for Research on Cancer

Predicted No Effect Concentration (PNEC)

LD50 - Lethal Dose 50%

EC50 - Effective Concentration 50% POW - Partition coefficient Octanol:Water vPvB - very Persistent, very Bioaccumulative

ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road

IMO/IMDG - International Maritime Organization/International Maritime Dangerous Goods Code

**OECD** - Organisation for Economic Co-operation and Development ATE - Acute Toxicity Estimate

**BCF** - Bioconcentration factor

Key literature references and sources for data

https://echa.europa.eu/information-on-chemicals

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

ICAO/IATA - International Civil Aviation Organization/International Air

**Transport Association** 

MARPOL - International Convention for the Prevention of Pollution from Ships

VOC - (Volatile Organic Compound)

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Physical hazards On basis of test data **Health Hazards** Calculation method **Environmental hazards** Calculation method

**Training Advice** 

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

**Prepared By** Regulatory Affairs on behalf of Thermo Fisher Scientific Australia

13-Jul-2012 **Creation Date** 10-Dec-2021 **Revision Date** 

Update to GHS format. **Revision Summary** 

This safety data sheet complies with the requirements of Safe Work Australia WHS Regulation. COMMISSION REGULATION (EU) 2020/878 amending Annex II to Regulation (EC) No 1907/2006 .

#### **Disclaimer**

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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## **End of Safety Data Sheet**