SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Millipore

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

1.1	Product identifiers Product name	 ChromoCult[®] Listeria Agar Selective- Supplement 	
	Product Number Catalogue No. Brand REACH No.	 1.00432 100432 Millipore This product is a mixture. REACH Registration Number see section 3. 	
1.2	Relevant identified uses of the substance or mixture and uses advised against		
	Identified uses	: Biochemical research/analysis	
1.3	Details of the supplier of the safety data sheet		
	Company	: Merck Life Science spol. s r. o. Na Hřebenech II 1718/10 CZ-140 00 PRAGUE	
1.4	Telephone E-mail address Emergency telephone	: +420 246 003-251 : TechnicalService@merckgroup.com	
	Emergency Phone #	 +420 228880039(CHEMTREC) +420 224919293/224915402 (Toxikologické informační středisko) 	

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 Respiratory sensitization (Category 1), H334 Skin sensitization (Category 1), H317 Carcinogenicity (Category 2), H351 Specific target organ toxicity - repeated exposure (Category 2), H373

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

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008 Pictogram

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Signal Word	Danger	
Hazard statement(s) H317 H334 H351 H373	May cause an allergic skin reaction. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Suspected of causing cancer. May cause damage to organs through prolonged or repeated exposure.	
Precautionary statement(s)		
P202	Do not handle until all safety precautions have been read and understood.	
P260	Do not breathe dust.	
P272	Contaminated work clothing should not be allowed out of the workplace.	
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.	
P302 + P352	IF ON SKIN: Wash with plenty of water.	
P308 + P313	IF exposed or concerned: Get medical advice/ attention.	
Supplemental Hazard Statements	none	
Reduced Labeling (<= 125 ml) Pictogram		
Signal Word	Danger	
Hazard statement(s)		

Hazard statement(s)	
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317	May cause an allergic skin reaction.
H351	Suspected of causing cancer.
Precautionary statement(s)	
P202	Do not handle until all safety precautions have been read and understood.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P302 + P352	IF ON SKIN: Wash with plenty of water.
P308 + P313	IF exposed or concerned: Get medical advice/ attention.
Supplemental Hazard Statements	none

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.

Caution: Physiologically highly active, therapeutically usable substance. The substance must be handled with the care required for hazardous materials.

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SECTION 3: Composition/information on ingredients

3.2 Mixtures

Component		Classification	Concentration
sodium-1-ethyl-1,	4-dihydro-7-methyl-	-4-oxo-1,8-naphthyridin-3-cart	oxylate
CAS-No.	3374-05-8	Acute Tox. 4; Carc. 2; H302, H351	>= 1 - < 10 %
	*		
ceftazidime			
CAS-No. EC-No.	72558-82-8 276-715-9	Resp. Sens. 1; Skin Sens. 1; H334, H317	>= 1 - < 10 %
	*		
amphotericin B			
CAS-No. EC-No.	1397-89-3 215-742-2 *	STOT RE 1; H372	>= 1 - < 10 %
Polymyxin B sulfat	te		
CAS-No. EC-No.	1405-20-5 215-774-7	Acute Tox. 4; H302	>= 1 - < 10 %
	*		

*A registration number is not available for this substance as the substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) No 1907/2006, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

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

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

First aiders need to protect themselves. Show this material safety data sheet to the doctor in attendance.

If inhaled

After inhalation: fresh air. Call in physician.

In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Consult a physician.

In case of eye contact

After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.

If swallowed

After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

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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: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media Water Foam Carbon dioxide (CO2) Dry powder

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Carbon oxides Nitrogen oxides (NOx) Sulfur oxides Hydrogen chloride gas Sodium oxides Mixture with combustible ingredients. Development of hazardous combustion gases or vapours possible in the event of fire.

5.3 Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

5.4 Further information

Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains.

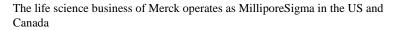
6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections For disposal see section 13.

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SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling

Work under hood. Do not inhale substance/mixture.

Hygiene measures

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Tightly closed. Dry. Keep locked up or in an area accessible only to qualified or authorized persons.

Recommended storage temperature see product label.

Storage class

Storage class (TRGS 510): 11: 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

Ingredients with workplace control parameters

8.2 Exposure controls

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). Safety glasses

Skin protection

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Full contact Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: > 480 min Material tested:KCL 741 Dermatril® L

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de). Splash contact Material: Nitrile rubber

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Minimum layer thickness: 0,11 mm Break through time: > 480 min Material tested:KCL 741 Dermatril® L

Body Protection

protective clothing

Respiratory protection

Recommended Filter type: Filter P 3 (acc. to DIN 3181) for solid and liquid particles of toxic and very toxic substances

The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

required when dusts are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system. Recommended Filter type: Filter type P3

The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

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)	Physical state	Lyophilisate
b)	Color	light yellow
c)	Odor	odorless
d)	Melting point/freezing point	No data available
e)	Initial boiling point and boiling range	No data available
f)	Flammability (solid, gas)	No data available
g)	Upper/lower flammability or explosive limits	No data available
h)	Flash point	No data available
i)	Autoignition temperature	No data available
j)	Decomposition temperature	No data available
k)	рН	ca.6,2 at 20 °C Aqueous solution
I)	Viscosity	Viscosity, kinematic: No data available

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Viscosity, dynamic: No data available

- m) Water solubility No data available
- n) Partition coefficient: No data available n-octanol/water
- o) Vapor pressure No data available
- p) Density No data available
 Relative density No data available
 q) Relative vapor No data available
- r) Particle No data available characteristics
- s) Explosive properties Not classified as explosive.
- t) Oxidizing properties none

9.2 Other safety information

No data available

density

SECTION 10: Stability and reactivity

10.1 Reactivity

The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

10.3 Possibility of hazardous reactions

Violent reactions possible with: Strong oxidizing agents Peroxides Ammonia Alkali metals Reducing agents Strong bases Strong acids strong alkalis

10.4 Conditions to avoid

no information available

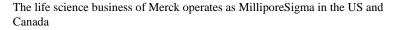
10.5 Incompatible materials

No data available

10.6 Hazardous decomposition products In the event of fire: see section 5

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SECTION 11: Toxicological information

11.1 Information on toxicological effects

Mixture

Acute toxicity

Acute toxicity estimate Oral - > 2.000 mg/kg (Calculation method) 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

Mixture may cause allergy or asthma symptoms or breathing difficulties if inhaled. Mixture may cause an allergic skin reaction.

Germ cell mutagenicity

No data available

Carcinogenicity

Evidence of a carcinogenic effect.

Reproductive toxicity No data available

Specific target organ toxicity - single exposure No data available

Specific target organ toxicity - repeated exposure Mixture may cause damage to organs through prolonged or repeated exposure.

Aspiration hazard No data available

11.2 Additional Information

Endocrine disrupting properties

Product:

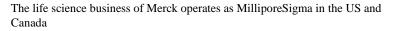
Assessment

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Other dangerous properties can not be excluded.

This substance should be handled with particular care.

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Components

sodium-1-ethyl-1,4-dihydro-7-methyl-4-oxo-1,8-naphthyridin-3-carboxylate

Acute toxicity

LD50 Oral - 500,1 mg/kg (Expert judgment) 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

Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.

Germ cell mutagenicity

No data available

Carcinogenicity

This product is or contains a component that has been reported to be probably carcinogenic based on its IARC, OSHA, ACGIH, NTP, or EPA classification.

Reproductive toxicity

No data available 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

ceftazidime

Acute toxicity

LD50 Oral - Rat - > 20.000 mg/kg Remarks: Sense Organs and Special Senses (Nose, Eye, Ear, and Taste):Eye:Other. Behavioral:Convulsions or effect on seizure threshold. Lungs, Thorax, or Respiration:Dyspnea. Inhalation: No data available Dermal: No data available

Skin corrosion/irritation

Skin - Rabbit Result: No skin irritation Remarks: (External MSDS)

Serious eye damage/eye irritation

Eyes - Rabbit Result: slight irritation Remarks: (External MSDS)

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Respiratory or skin sensitization

May cause allergic respiratory and skin reactions (External MSDS)

Germ cell mutagenicity

Test Type: Ames test Test system: S. typhimurium Result: negative Remarks: (External MSDS)

Carcinogenicity No data available

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

amphotericin B

Acute toxicity

LD50 Oral - Rat - > 5.000 mg/kg 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

Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.

Germ cell mutagenicity No data available

Carcinogenicity No data available

Reproductive toxicity No data available

Specific target organ toxicity - single exposure No data available

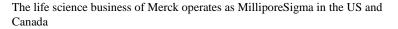
Specific target organ toxicity - repeated exposure No data available

Aspiration hazard

No data available

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Polymyxin B sulfate

Acute toxicity

LD50 Oral - Mouse - 790 mg/kg Inhalation: No data available Dermal: No data available

Skin corrosion/irritation Remarks: 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 No data available

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

SECTION 12: Ecological information

12.1 Toxicity

Mixture 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 Endocrine disrupting properties <u>Product:</u>

Assessment

: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission

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12.7 Other adverse effects

Discharge into the environment must be avoided.

Components

sodium-1-ethyl-1,4-dihydro-7-methyl-4-oxo-1,8-naphthyridin-3-carboxylate

No data available

ceftazidime

LC50 - Oncorhynchus mykiss (rainbow trout) - > 106 mg/l - 96 h	
Remarks: (External MSDS)	

Toxicity to daphnia	EC50 - Daphnia magna (Water flea) - > 106 mg/l - 48 h
and other aquatic	Remarks: (External MSDS)
invertebrates	

amphotericin B

No data available

Polymyxin B sulfate

No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods No data available

SECTION 14. Type anothing			
SECTION 14: Transport informa			
14.1 UN number ADR/RID: -	IMDG: -	IATA: -	
14.2UN proper shipping name ADR/RID:Not dangerous goodsIMDG:Not dangerous goodsIATA: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 us	er		

14.6 Special precautions for user

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Further information

Not classified as dangerous in the meaning of transport regulations.

SECTION 15: Regulatory information

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

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

Other regulations

Observe work restrictions regarding maternity protection in accordance to Dir 92/85/EEC or stricter national regulations where applicable.

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

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.

- H302 Harmful if swallowed.
- H317 May cause an allergic skin reaction.
- H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- H351 Suspected of causing cancer.
- H372 Causes damage to organs through prolonged or repeated exposure.
- H373 May cause damage to organs through prolonged or repeated exposure.

Relevant changes since previous version

2. Hazards identification

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Full text of other abbreviations

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; 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; 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; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; 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; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS -Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; 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

Classification of the mixture

Classification procedure:

Resp. Sens.1	H334	Calculation method
Skin Sens.1	H317	Calculation method
Carc.2	H351	Calculation method
STOT RE2	H373	Calculation method

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Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

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