

SECTION 1 Identification

1.1. GHS Product identifier

Product form : Mixture
Trade name : Listeria Enrichment Broth
Type of product : Food Safety -- [Food Safety]
Product code : NCM0055

1.2. Other means of identification

Part Number(s) : NCM0055|400000772|700003117|700003118|700003119

1.3. Recommended use of the chemical and restrictions on use

Use of the substance/mixture : Laboratory chemicals, Scientific research and development

1.4. Supplier's details

Neogen Corporation
620 Leshler Place
Lansing, Michigan 48912
United States of America
T 800.234.5333
sds@neogen.com - <https://www.neogen.com/>

1.5. Emergency phone number

Emergency number : 24 hours:
Medical: 1-800-498-5743 (U.S. and Canada) or 1-651-523-0318 (international)
Spill/CHEMTREC: 1-800-424-9300 (U.S. and Canada) or 1-703-527-3887 (international)

SECTION 2 Hazard identification

2.1. Classification of the substance or mixture

Classification (GHS CA)

Skin sensitization, Category 1 H317 May cause an allergic skin reaction
Reproductive toxicity, Category 1B H360 May damage fertility or the unborn child
Full text of H statements : see section 16

2.2. GHS label elements, including precautionary statements

GHS CA labeling

Hazard pictograms (GHS CA) : 

Signal word (GHS CA) : Danger

Hazard statements (GHS CA) : H317 - May cause an allergic skin reaction
H360 - May damage fertility or the unborn child

Precautionary statements (GHS CA) : P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P261 - Avoid breathing dust, fume, gas, mist, vapors, spray.
P272 - Contaminated work clothing should not be allowed out of the workplace.
P280 - Wear protective gloves, protective clothing, eye protection, face protection, and hearing

Listeria Enrichment Broth

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

protection.

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

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

P321 - Specific treatment (see supplemental first aid instruction on this label).

P333+P313 - If skin irritation or rash occurs: Get medical advice or attention.

P362+P364 - Take off contaminated clothing and wash it before reuse.

P405 - Store locked up.

P501 - Dispose of contents and/or container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations.

2.3. Other hazards which do not result in classification

No additional information available

SECTION 3 Composition/information on ingredients

3.1. Substances

Not applicable

Listeria Enrichment Broth

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

3.2. Mixtures

Listeria Enrichment Broth

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

Name	Chemical name / Synonyms	Product identifier	%	Classification (GHS CA)
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Listeria Enrichment Broth

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

Cycloheximide	Cycloheximide [1S-[1-alpha(S*),3alpha,5beta]]-4-[2-(3,5-dimethyl-2-oxocyclohexyl)-2-hydroxyethyl]-2,6-piperidinedione / 2,6-piperidinedione, 4-[2-(3,5-dimethyl-2-oxocyclohexyl)-2-hydroxyethyl]-, [1S-[1alpha(S*),3alpha,5beta]]- / 3-(2-(3,5-dimethyl-2-oxocyclohexyl)-2-hydroxyethyl)glutaramide / 3-(2-(3,5-dimethyl-2-oxocyclohexyl)-2-hydroxyethyl)pentanedioic acid imide / 3-(2R)-2-[(1S,3S)-3,5-dimethyl-2-oxocyclohexyl]-2-hydroxyethylglutaramide / 3-[2-(3,5-dimethyl-2-oxocyclohexyl)-2-hydroxyethyl]glutaramide / 4-(2R)-2-[(1S,3S,5S)-(3,5-dimethyl-2-oxocyclohexyl)]-2-hydroxyethylpiperidine-2,6-dione / 4-[2-(3,5-dimethyl-2-oxocyclohexyl)-2-hydroxyethyl]-2,6-piperidinedione / 4-{}{(2R)-2-[(1S,3S,5S)-3,5-dimethyl-2-oxocyclohexyl]-2-hydroxyethyl}}piperidine-2,6-dione / acti-aid / actidion / actidione / actidione BR / actidione PM / acti-dione PM / actidione TGF /	CAS-No.: 66-81-9	0.138	Acute Tox. 2 (Oral), H300 Muta. 2, H341 Repr. 1B, H360 Aquatic Chronic 2, H411
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Listeria Enrichment Broth

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

Name	Chemical name / Synonyms	Product identifier	%	Classification (GHS CA)
	acti-dione TGF / actidone / actispray / aktidion / beta-(2-(3,5-dimethyl-2-oxocyclohexyl)-2-hydroxyethyl)glutarimide / cicloheximide / cycloheximide / hizarocin / kaken / naramycin / naramycin A / neocycloheximide / NSC-185 / U-4527			

Listeria Enrichment Broth

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

Nalidixic acid	1-Ethyl-1,4-dihydro-7-methyl-4-oxo-1,8-naphthyridine-3-carboxylic acid ; Nalidixic acid 1,4-dihydro-1-ethyl-7-methyl-4-oxo-1,8-naphthyridine-3-carboxylic acid / 1,8-naphthyridine-3-carboxylic acid, 1-ethyl-1,4-dihydro-7-methyl-4-oxo- / 1-ethyl-1,4-dihydro-7-methyl-4-oxo-1,8-naphthyridine-3-carboxylic acid / 1-ethyl-7-methyl-1,4-dihydro-1,8-naphthyridin-4-one-3-carboxylic acid / 1-ethyl-7-methyl-1,8-naphthyridin-4-one-3-carboxylic acid / 1-ethyl-7-methyl-4-oxo-1,4-dihydro-1,8-naphthyridine-3-carboxylic acid / 3-carboxy-1-ethyl-7-methyl-1,8-naphthidin-4-one / betaxina / cybis / dixiben / eucisten / innoxalon / kusnarin / nalidic acid / nalidicron / nalidixan / nalidixic acid / nalidixin / nalidixinic acid / nalitucsan / nalix / nalurin / narigix / naxuril / NCI-C56199 / neggram / negram / nevigramon / nicelate / nogram / NSC-82174 / poleon / specifene / specifin / uralgin / uriben / uriclar /	CAS-No.: 389-08-2	0.11	Acute Tox. 4 (Oral), H302 Skin Sens. 1, H317 Muta. 2, H341
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Listeria Enrichment Broth

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

Name	Chemical name / Synonyms	Product identifier	%	Classification (GHS CA)
	urisal / urodixin / uroman / uroneg / uropan / WIN 18,320 / wintomylon			

Full text of hazard classes and H-statements : see section 16

SECTION 4 First-aid measures

4.1. Description of necessary first-aid measures

First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse eyes with water as a precaution.
First-aid measures after ingestion	: Call a poison center/doctor/physician if you feel unwell.
First-aid measures general	: IF exposed or concerned: Get medical advice/attention.

4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects after inhalation	: None under normal conditions. Dust of the product, if present, may cause respiratory irritation after an excessive inhalation exposure.
Symptoms/effects after skin contact	: May cause an allergic skin reaction.
Symptoms/effects after eye contact	: None under normal conditions. Dust from this product may cause eye irritation.
Symptoms/effects after ingestion	: None under normal conditions.
Chronic symptoms	: May damage fertility or the unborn child.

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Other medical advice or treatment	: Treat symptomatically.
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SECTION 5 Fire-fighting measures

5.1. Suitable extinguishing media

Suitable extinguishing media	: Water spray. Dry powder. Foam.
Unsuitable extinguishing media	: Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard	: No fire hazard.
Explosion hazard	: No direct explosion hazard.
Hazardous decomposition products in case of fire	: Toxic fumes may be released.

5.3. Special protective actions for fire-fighters

Firefighting instructions	: Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

Listeria Enrichment Broth

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material-damage.
- Environmental precautions : Avoid release to the environment. Notify authorities if product enters sewers or public waters.

6.2. Methods and materials for containment and cleaning up

- For containment : Using a clean shovel, put the material in a dry container and cover without compressing it.
- Methods for cleaning up : Mechanically recover the product. Notify authorities if product enters sewers or public waters.
- Other information : Dispose of materials or solid residues at an authorized site.

For further information refer to section 13

SECTION 7 Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray.
- Hygiene measures : Separate working clothes from town clothes. Launder separately. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Keep in a cool, well-ventilated place away from heat.
- Storage conditions : Store locked up.
- Storage temperature : 2 – 30 °C
- Packaging materials : Store always product in container of same material as original container.

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Appropriate engineering controls

- Appropriate engineering controls : Ensure good ventilation of the work station.
- Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures, such as personal protective equipment (PPE)

Personal protective equipment:

Wear recommended personal protective equipment.

Hand protection:

Protective gloves

Listeria Enrichment Broth

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

[In case of inadequate ventilation] wear respiratory protection.

Personal protective equipment symbol(s):



SECTION 9 Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state	: Solid
Appearance	: Powder.
Color	: Beige
Odor	: Characteristic
Odor threshold	: No data available
pH	: 7.1 – 7.5
Relative evaporation rate (butyl acetate=1)	: No data available
Relative evaporation rate (ether=1)	: No data available
Melting point	: No data available
Freezing point	: Not applicable
Boiling point	: No data available
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: No data available
Flammability (solid, gas)	: Non flammable.
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: No data available
Solubility	: Soluble in water.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Viscosity, kinematic	: Not applicable
Explosion limits	: Not applicable
Particle characteristics	: No data available

9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

SECTION 10 Stability and reactivity

Reactivity	: The product is non-reactive under normal conditions of use, storage and transport.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No dangerous reactions known under normal conditions of use.
Conditions to avoid	: None under recommended storage and handling conditions (see section 7).

Listeria Enrichment Broth

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

Incompatible materials	: No additional information available
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Hardening time:	: No additional information available

SECTION 11 Toxicological information

11.1. Likely routes of exposure

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

Listeria Enrichment Broth	
Unknown acute toxicity (GHS CA)	6.84% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral) 13.79% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal) 13.79% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))

Cycloheximide (66-81-9)	
LD50 oral rat	2 mg/kg (Rat, Literature study, Oral)
LD50 oral	2 mg/kg
ATE CA (oral)	2 mg/kg body weight

Nalidixic acid (389-08-2)	
LD50 oral rat	1160 mg/kg (Rat, Oral)
ATE CA (oral)	1160 mg/kg body weight

Skin corrosion/irritation	: Not classified. pH: 7.1 – 7.5
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Cycloheximide (66-81-9)	
pH	4 – 5 (2 %)

Serious eye damage/irritation	: Not classified pH: 7.1 – 7.5
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Cycloheximide (66-81-9)	
pH	4 – 5 (2 %)

Respiratory or skin sensitization	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: May damage fertility or the unborn child.
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

Listeria Enrichment Broth	
Viscosity, kinematic	Not applicable

Cycloheximide (66-81-9)	
Viscosity, kinematic	Not applicable (solid)

Nalidixic acid (389-08-2)	
Viscosity, kinematic	Not applicable

Listeria Enrichment Broth

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

Symptoms/effects after inhalation	: None under normal conditions. Dust of the product, if present, may cause respiratory irritation after an excessive inhalation exposure.
Symptoms/effects after skin contact	: May cause an allergic skin reaction.
Symptoms/effects after eye contact	: None under normal conditions. Dust from this product may cause eye irritation.
Symptoms/effects after ingestion	: None under normal conditions.
Chronic symptoms	: May damage fertility or the unborn child.

SECTION 12 Ecological information

12.1. Toxicity

Ecology - general	: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.
Hazardous to the aquatic environment, short-term (acute)	: Not classified.
Hazardous to the aquatic environment, long-term (chronic)	: Not classified.

Cycloheximide (66-81-9)	
LC50 - Fish [1]	1.6 mg/l (48 h, Oryzias latipes, Literature study)
EC50 72h - Algae [1]	2.215 mg/l Source: Toxic Substances Information Summary
Nalidixic acid (389-08-2)	
LC50 - Fish [1]	722.335 mg/l Source: Ecological Structure Activity Relationships
EC50 96h - Algae [1]	910.539 mg/l Source: Ecological Structure Activity Relationships

12.2. Persistence and degradability

Listeria Enrichment Broth	
Persistence and degradability	Not rapidly degradable
Cycloheximide (66-81-9)	
Persistence and degradability	Not readily biodegradable in water.
Nalidixic acid (389-08-2)	
Persistence and degradability	Biodegradability in water: no data available.

12.3. Bioaccumulative potential

Cycloheximide (66-81-9)	
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
BCF - Other aquatic organisms [1]	3.2 l/kg (BCFBAF v3.01, Estimated value, Fresh weight)
Partition coefficient n-octanol/water (Log Pow)	0.55 (Experimental value)
Nalidixic acid (389-08-2)	
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
Partition coefficient n-octanol/water (Log Pow)	1.41

12.4. Mobility in soil

Cycloheximide (66-81-9)	
Surface tension	No data available in the literature

Listeria Enrichment Broth

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

Cycloheximide (66-81-9)	
Ecology - soil	Highly mobile in soil.
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1 (log Koc, SRC PCKOCWIN v2.0, Calculated value)

12.5. Other adverse effects

Ozone	: Not classified
Fluorinated greenhouse gases	: No

SECTION 13 Disposal considerations

Regional waste regulation	: Disposal must be done according to official regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Comply with applicable regulations for solid waste disposal. Disposal must be done according to official regulations.
Additional information	: Do not re-use empty containers.

SECTION 14 Transport information

In accordance with TDG / DOT / IMDG / IATA

TDG	DOT	IMDG	IATA
14.1. UN Number			
Not regulated for transport			
14.2. UN Proper Shipping Name			
Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)			
Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group, if applicable			
Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards			
Not regulated	Not regulated	Not regulated	Not regulated
No supplementary information available			

14.6. Special precautions for user

TDG

Not regulated

DOT

Not regulated

IMDG

Not regulated

IATA

Not regulated

Listeria Enrichment Broth

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

14.7. Transport in bulk according to Annex II of MARPOL 73/78⁹ and the IBC Code¹⁰

Not applicable

SECTION 15 Regulatory information

Cycloheximide (66-81-9)

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

Nalidixic acid (389-08-2)

Listed on the Canadian DSL (Domestic Substances List)

Canada DSL & NDSL Flags

Significant New Activity (SNAc) provisions of the Act apply

Cycloheximide (66-81-9)

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

Nalidixic acid (389-08-2)

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

Listed on INSQ (Mexican National Inventory of Chemical Substances)

SECTION 16 Other Information

Issue date : 05-14-2025

Full text of hazard classes and H-statements:

H300	Fatal if swallowed
H302	Harmful if swallowed
H317	May cause an allergic skin reaction
H341	Suspected of causing genetic defects.
H360	May damage fertility or the unborn child
H411	Toxic to aquatic life with long lasting effects

Safety Data Sheet (SDS), Canada

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.