

SECTION 1 Identification

1.1. GHS Product identifier

Product form : Mixture
Trade name : Clostridium Difficile Agar Base
Type of product : Food Safety -- [Food Safety]
Product code : NCM0128

1.2. Other means of identification

Part Number(s) : NCM0128|700004515|700004516

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 Leshar 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
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) : Warning

Hazard statements (GHS CA) : H317 - May cause an allergic skin reaction

Precautionary statements (GHS CA) : 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 protection.
P302+P352 - IF ON SKIN: Wash with plenty of water.
P321 - Specific treatment (see supplemental first aid instruction on this label).
P333+P313 - If skin irritation or rash occurs: Get medical advice or attention.

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

3.2. Mixtures

Name	Chemical name / Synonyms	Product identifier	%	Classification (GHS CA)
Sodium cholate	(3 α ,5 β ,7 α ,12 α)-3,7,12-Trihydroxycholan-24-oic acid monosodium salt ; Cholic acid monosodium salt 3 α ,7 α ,12 α -trihydroxy-5 β -cholanic acid sodium salt / cholan-24-oic acid, 3,7,12-trihydroxy-, monosodium salt, (3 α ,5 β ,7 α ,12 α)- / cholic acid sodium salt / cholic acid, monosodium salt / DS-Na / sodium cholate / sodium cholic acid	CAS-No.: 361-09-1	2.073	Aquatic Acute 3, H402 Aquatic Chronic 3, H412

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Name	Chemical name / Synonyms	Product identifier	%	Classification (GHS CA)
4-Hydroxyphenylacetic acid	(4-hydroxyphenyl)acetic acid / (para-hydroxyphenyl)acetic acid / (p-hydroxyphenyl)acetic acid / 4-hydroxybenzoic acid / acetic acid, (para-hydroxyphenyl)- / acetic acid, (p-hydroxyphenyl)- / benzoic acid, 4-hydroxy- / para-hydroxyphenylacetic acid / p-hydroxyphenylacetic acid	CAS-No.: 156-38-7	2.073	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317 STOT SE 3, H335
L-Arginine	L-Arginine (S)-(+)-arginine / (S)-2-amino-5-guanidinopentanoic acid / 2-amino-5-guanidinopentanoic acid,(S)- / 2-amino-5-guanidinovaleric acid,L- / ARG / arginine / arginine,(S)-(+)- / L-2-amino-5-guanidinovaleric acid / L-arginine / pentanoic acid, 2-amino-5-((aminoiminomethyl)amino-, (S)-	CAS-No.: 74-79-3	1.038	Eye Irrit. 2A, H319
Sodium pyruvate	2-Oxopropanoic acid sodium salt ; Sodium pyruvate 2-oxo-propanoic acid, sodium salt / acetylformic acid, sodium salt / propanoic acid, 2-oxo-, sodium salt / pyruvic acid sodium salt / sodium pyruvate	CAS-No.: 113-24-6	1.038	Eye Irrit. 2, H319 Skin Sens. 1B, H317

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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 you feel unwell, seek medical advice.

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.

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.

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.

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.

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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. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray. Wear personal protective equipment.

Hygiene measures : 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 : Keep cool. Protect from sunlight.

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

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

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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	: 6.8 – 7.2
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).
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

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Clostridium Difficile Agar Base	
Unknown acute toxicity (GHS CA)	7.72% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral) 44.06% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal) 44.06% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))
Sodium cholate (361-09-1)	
LD50 oral	2400 mg/kg body weight Animal: mouse
ATE CA (oral)	2400 mg/kg body weight
4-Hydroxyphenylacetic acid (156-38-7)	
LD50 oral rat	> 10000 mg/kg body weight (Rat, Experimental value, Oral)
LD50 dermal rabbit	> 5000 mg/kg body weight (Rabbit, Skin)
L-Arginine (74-79-3)	
LD50 oral rat	> 5110 mg/kg body weight Animal: rat, Guideline: other:
Sodium pyruvate (113-24-6)	
LD50 oral	3533 mg/kg body weight (Mouse, Experimental value, Oral)
LD50 dermal rat	> 3000 mg/kg body weight (Rat, Male, Experimental value, Intraperitoneal)
ATE CA (oral)	3533 mg/kg body weight
Skin corrosion/irritation	: Not classified. pH: 6.8 – 7.2
Sodium cholate (361-09-1)	
pH	8 – 9.5 (5 %)
Sodium pyruvate (113-24-6)	
pH	7 (10 %)
Serious eye damage/irritation	: Not classified pH: 6.8 – 7.2
Sodium cholate (361-09-1)	
pH	8 – 9.5 (5 %)
Sodium pyruvate (113-24-6)	
pH	7 (10 %)
Respiratory or skin sensitization	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
4-Hydroxyphenylacetic acid (156-38-7)	
NOAEL (animal/female, F0/P)	556 mg/kg body weight Animal: rat, Animal sex: female, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
STOT-single exposure	: Not classified
4-Hydroxyphenylacetic acid (156-38-7)	
STOT-single exposure	May cause respiratory irritation.
STOT-repeated exposure	: Not classified

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4-Hydroxyphenylacetic acid (156-38-7)	
NOAEL (oral,rat,90 days)	1000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)

Aspiration hazard : Not classified

Clostridium Difficile Agar Base	
Viscosity, kinematic	Not applicable

4-Hydroxyphenylacetic acid (156-38-7)	
Viscosity, kinematic	Not applicable

Sodium pyruvate (113-24-6)	
Viscosity, kinematic	Not applicable (solid)

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.

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.

Sodium cholate (361-09-1)	
LC50 - Fish [1]	45356.434 mg/l Source: Ecological Structure Activity Relationships
EC50 - Other aquatic organisms [1]	35.8713 mg/l Test organisms (species):
EC50 72h - Algae [1]	169.7059 mg/l Test organisms (species):
EC50 96h - Algae [1]	22734.682 mg/l Source: Ecological Structure Activity Relationships

4-Hydroxyphenylacetic acid (156-38-7)	
LC50 - Fish [1]	> 100 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Danio rerio, Static system, Fresh water, Experimental value)
EC50 - Crustacea [1]	100.8 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value)
EC50 72h - Algae [1]	106.9 mg/l (OECD 201: Alga, Growth Inhibition Test, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, Growth rate)

L-Arginine (74-79-3)	
LC50 - Fish [1]	2.8 g/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Danio rerio, Semi-static system, Fresh water, Experimental value)
EC50 96h - Algae [1]	26857 mg/l Source: Ecological Structure Activity Relationships

Sodium pyruvate (113-24-6)	
LC50 - Fish [1]	> 100 mg/l (96 h, Pisces, QSAR, Nominal concentration)

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Sodium pyruvate (113-24-6)	
EC50 - Crustacea [1]	> 100 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Nominal concentration)
ErC50 algae	> 3 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)
EC50 72h - Algae [1]	2.78 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
EC50 96h - Algae [1]	94800000 mg/l Source: ECOSAR
NOEC (chronic)	3.95 mg/l Test organisms (species): Duration: '28 d'

12.2. Persistence and degradability

Clostridium Difficile Agar Base	
Persistence and degradability	Not rapidly degradable

Sodium cholate (361-09-1)	
Persistence and degradability	Not readily biodegradable in water.

4-Hydroxyphenylacetic acid (156-38-7)	
Persistence and degradability	Readily biodegradable in water.

L-Arginine (74-79-3)	
Persistence and degradability	Readily biodegradable in water.

Sodium pyruvate (113-24-6)	
Persistence and degradability	Readily biodegradable in water.

12.3. Bioaccumulative potential

Sodium cholate (361-09-1)	
Bioaccumulative potential	Not bioaccumulative.
Partition coefficient n-octanol/water (Log Pow)	-0.29 (Calculated, KOWWIN)

4-Hydroxyphenylacetic acid (156-38-7)	
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
BCF - Fish [1]	3 (Pisces, Fresh water, Experimental value)
Partition coefficient n-octanol/water (Log Pow)	0.75 (25 °C)

L-Arginine (74-79-3)	
Bioaccumulative potential	Not bioaccumulative.
Partition coefficient n-octanol/water (Log Pow)	-4.2 (Practical experience/observation, 20 °C)

Sodium pyruvate (113-24-6)	
Bioaccumulative potential	Not bioaccumulative.
Partition coefficient n-octanol/water (Log Pow)	-3.8 (Practical experience/observation, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 20 °C)

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12.4. Mobility in soil

Sodium cholate (361-09-1)	
Mobility in soil	1140 Source: Quantitative Structure Activity Relation
Ecology - soil	Highly mobile in soil.
4-Hydroxyphenylacetic acid (156-38-7)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.154 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value)
L-Arginine (74-79-3)	
Ecology - soil	No (test)data on mobility of the substance available.
Sodium pyruvate (113-24-6)	
Surface tension	No data available in the literature
Ecology - soil	No (test)data on mobility of the substance available.

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			

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14.6. Special precautions for user

TDG

Not regulated

DOT

Not regulated

IMDG

Not regulated

IATA

Not regulated

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

Not applicable

SECTION 15 Regulatory information

Sodium cholate (361-09-1)

Listed on the Canadian DSL (Domestic Substances List)

Canada DSL & NDSL Flags

Significant New Activity (SNAc) provisions of the Act apply

4-Hydroxyphenylacetic acid (156-38-7)

Listed on the Canadian DSL (Domestic Substances List)

Canada DSL & NDSL Flags

Significant New Activity (SNAc) provisions of the Act apply

L-Arginine (74-79-3)

Listed on the Canadian DSL (Domestic Substances List)

Canada DSL & NDSL Flags

Significant New Activity (SNAc) provisions of the Act apply

Sodium pyruvate (113-24-6)

Listed on the Canadian DSL (Domestic Substances List)

Canada DSL & NDSL Flags

Significant New Activity (SNAc) provisions of the Act apply

Sodium cholate (361-09-1)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active

Listed on INSQ (Mexican National Inventory of Chemical Substances)

4-Hydroxyphenylacetic acid (156-38-7)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active

L-Arginine (74-79-3)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active

Listed on INSQ (Mexican National Inventory of Chemical Substances)

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Sodium pyruvate (113-24-6)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active

SECTION 16 Other Information

Issue date : 05-16-2025

Full text of hazard classes and H-statements:

H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H402	Harmful to aquatic life
H412	Harmful 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.