Harlequin® Chromogenic Agar for Salmonella Esterase (CASE)

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)
Issue date: 06-09-2025 Version: 1.0

SECTION 1 Identification

1.1. GHS Product identifier

Product form : Mixture
Trade name : Harlequin® Chromogenic Agar for Salmonella Esterase (CASE)
Type of product : Food Safety -- [Food Safety]
Product code : NCM1006

1.2. Other means of identification

Part Number(s) : NCM1006|700004800|700004801|700004804

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 Lesher 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 1B	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.
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)

Kaolin	Kaolin AF950 / altowhite / altowhites / anauxite / andalusite / argilla / argilla alba / asp / asp 400P / asp-nc / barden clay / bentone / blue ridge / bolus / bolus alba / BUCA / C.I.77004 / catalpo / catalpo X1 / china clay / clay / clay 347 / clay filtrol 1 / clay glomax lL / clay hydrite R / clay processed pembina 130 / continental (=kaolin) / cornish clay / cyanite / devolite / dickite / dixie (=kaolin) / electros / emathlite / endellite / fitrol / fitrol desiccite 25 / glomax / grade B / grade E / hydrite / kao-gel / kaolin / kaolin clay / kaolin clay AC-3 / kaolin clay hydrosperse huber / kaolin colloidal / kaopaous / kaophills-2 / kochite / langford / light kaolin / mcnamee / mullite / myelin / nacrite / newtonite / osmo kaolin / par / parclay / peerless (=kaolin) / pencil stone / pharmolin / pipeclay / porcelain clay / porcelain earth / pyrax A / pyrax ABB / pyrax B / pyrax HS / pyrax RG 1/4 / pyrax RG 140 / pyrax RG 16 / pyrax RG	CAS-No.: 1332-58-7	15.033	Acute Tox. 4 (Inhalation:dust,mist), H332

Name	Chemical name / Synonyms	Product identifier	%	Classification (GHS CA)
	200 / pyrax RG 3/8 / pyrax WA / pyrophyllite / satintone(=kaolin) / sillikolloid / sillikoloid / sillimanite / sillitin N82 / sillitin N85 / sillitin N89 / sillitin Z86 / snow tex / SP33 / speswhite china clay / stockalite / suprex / takizolit / takizolite / termierite / ton / translink 445 (=kaolin) / translink 555 (=kaolin) / translink hf-900 (=kaolin) / ultralink / veecote / white bole / X2720			
Sodium cholate	(3α,5β,7α,12α)-3,7,12-Trihydroxycholan-24-oic acid monosodium salt ; Cholic acid monosodium salt 3alpha,7alpha,12 alpha-trihydroxy-5beta-cholanic acid sodium salt / cholan-24-oic acid, 3,7,12-trihydroxy-, monosodium salt, (3alpha,5beta,7alpha,12alpha)- / cholic acid sodium salt / cholic acid, monosodium salt / DS-Na / sodium cholate / sodium cholic acid	CAS-No.: 361-09-1	2.506	Aquatic Acute 3, H402 Aquatic Chronic 3, H412

Name	Chemical name / Synonyms	Product identifier	%	Classification (GHS CA)
Sodium deoxycholate	3,12-Dihydroxycholan-24-oic acid sodium salt ; Deoxychoic acid sodium salt 3 alpha, 12 alpha-dihydroxy-5-betha-cholan-24-oic acid, sodium salt / 3,12-dihydroxy-cholan-24-oic acid monosodium salt, (3-alpha, / 3-alpha,12-alpha-dihydroxy-5-beta-cholan-24-oic acid, sodium salt / 5-beta-cholan-24-oic acid, 3-alpha, 12-alpha-dihydroxy-, sod / cholan-24-oic acid, 3,12-dihydroxy-, monosodium salt, (3alpha,5beta,12alpha)- / deoxycholate sodium / deoxycholic acid sodium salt / deoxycholic acid, sodium salt / desoxycholate sodium / sodium 7-deoxycholate / sodium deoxycholate / sodium deoxycholic acid	CAS-No.: 302-95-4	2.506	Acute Tox. 4 (Oral), H302 STOT SE 3, H335
Oxbile (Oxgall)	-	CAS-No.: 8008-63-7	2.004	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335

Name	Chemical name / Synonyms	Product identifier	%	Classification (GHS CA)
D-(+)-Cellobiose	Cellobiose, D- / D-cellobiose / D-glucose, 4-O-beta-D-glucopyranosyl- / O-beta-D-glucopyranosyl(1-4)-beta-D-glucopyranose	CAS-No.: 528-50-7	1.002	Aquatic Acute 2, H401 Aquatic Chronic 2, H411
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	1.002	Eye Irrit. 2, H319 Skin Sens. 1B, H317

Name	Chemical name / Synonyms	Product identifier	%	Classification (GHS CA)
Ferric ammonium citrate	Ammonium iron(3+) citrate 1,2,3-propanetricarboxylic acid, 2-hydroxy-, ammonium iron(3+) salt / 2-hydroxy-1,2,3-propanetricarboxylic acid,ammonium iron(3+) salt / ammonium ferric citrate / ammonium ferric citrate,brown / ammonium ferric citrate,green / ammonium iron(III) citrate, green / ammonium iron(III) citrate,red-brown / citric acid ammonium iron(III) salt / citric acid,ammonium iron(3+) salt / FAC / ferric ammonium citrate / ferric ammonium citrate,brown / ferric ammonium citrate,green / iron ammonium citrate / iron(III) ammonium citrate	CAS-No.: 1185-57-5	1.002	Eye Irrit. 2A, H319 STOT SE 3, H335

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.

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.
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 – 8 °C
Packaging materials : Store always product in container of same material as original container.

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

Kaolin (1332-58-7)	
Canada (Alberta) - Occupational Exposure Limits	
Local name	Kaolin
OEL TWA	2 mg/m³ Respirable
Regulatory reference	Alberta Regulation 191/2021
Canada (Quebec) - Occupational Exposure Limits	
Local name	Kaolin
VEMP (OEL TWAEV)	2 mg/m³ Rd
Notations and remarks	Note 1: The standard corresponds to dust containing no asbestos and the percentage in crystalline silica is less than 1%
Regulatory reference	S-2.1, r. 13 - Regulation respecting occupational health and safety
Canada (British Columbia) - Occupational Exposure Limits	
Local name	Kaolin
OEL TWA	2 mg/m³ Respirable. (E) - the value is for particulate matter containing no asbestos and less than 1% crystalline silica
Regulatory reference	OHS Guidelines Part 5: Chemical Agents and Biological Agents (WorkSafe BC)
Canada (Manitoba) - Occupational Exposure Limits	
Local name	Kaolin
OEL TWA	2 mg/m³ (E - The value is for particulate matter containing no asbestos and < 1 % crystalline silica, R - Respirable particulate matter)
Notations and remarks	TLV® Basis: Pneumoconiosis. Notations: A4 (Not classifiable as a Human Carcinogen)
Regulatory reference	ACGIH 2025
Canada (New Brunswick) - Occupational Exposure Limits	
Local name	Kaolin
OEL TWA	2 mg/m³
Notations and remarks	Pneumoconiosis
Canada (Newfoundland and Labrador) - Occupational Exposure Limits	
Local name	Kaolin

Kaolin (1332-58-7)	
OEL TWA	2 mg/m³ (E - The value is for particulate matter containing no asbestos and < 1 % crystalline silica, R - Respirable particulate matter)
Notations and remarks	TLV® Basis: Pneumoconiosis. Notations: A4 (Not classifiable as a Human Carcinogen)
Regulatory reference	ACGIH 2025
Canada (Nova Scotia) - Occupational Exposure Limits	
Local name	Kaolin
OEL TWA	2 mg/m³ (E - The value is for particulate matter containing no asbestos and < 1 % crystalline silica, R - Respirable particulate matter)
Notations and remarks	TLV® Basis: Pneumoconiosis. Notations: A4 (Not classifiable as a Human Carcinogen)
Regulatory reference	ACGIH 2025
Canada (Nunavut) - Occupational Exposure Limits	
Local name	Kaolin
OEL TWA	2 mg/m³ (respirable fraction)
OEL STEL	4 mg/m³ (respirable fraction)
Regulatory reference	Occupational Health and Safety Regulations, Nu Reg 003-2016 (Amendment R-044-2021)
Canada (Northwest Territories) - Occupational Exposure Limits	
Local name	Kaolin
OEL TWA	2 mg/m³ (respirable fraction)
OEL STEL	4 mg/m³ (respirable fraction)
Regulatory reference	Occupation Health and Safety Regulations R-039-2015 (R-090-2024)
Canada (Ontario) - Occupational Exposure Limits	
Local name	Kaolin
OEL TWAEV	2 mg/m³ (E - The value is for particulate matter containing no asbestos and < 1 per cent crystalline silica) (R - Respirable fraction)
Regulatory reference	Occupational Health and Safety Act, R.S.O. 1990, c. O.1 - R.R.O. 1990, Reg. 833: Control of exposure to biological or chemical agents
Canada (Prince Edward Island) - Occupational Exposure Limits	
Local name	Kaolin
OEL TWA	2 mg/m³ (E - The value is for particulate matter containing no asbestos and < 1 % crystalline silica, R - Respirable particulate matter)
Notations and remarks	TLV® Basis: Pneumoconiosis. Notations: A4 (Not classifiable as a Human Carcinogen)
Regulatory reference	ACGIH 2025
Canada (Saskatchewan) - Occupational Exposure Limits	
Local name	Kaolin
OEL TWA	2 mg/m³ (respirable fraction)
OEL STEL	4 mg/m³ (respirable fraction)
Regulatory reference	The Occupational Health and Safety Regulations, 2020. Chapter S-15.1 Reg 10

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

Personal protective equipment symbol(s):

SECTION 9 Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state	:	Solid
Appearance	:	Powder.
Color	:	Off-white
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).
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.

Harlequin® Chromogenic Agar for Salmonella Esterase (CASE)	
Unknown acute toxicity (GHS CA)	35.08% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral) 66.15% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal) 51.11% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))

Kaolin (1332-58-7)	
LD50 oral rat	> 5000 mg/kg Source: HSDB
LD50 dermal rat	> 5000 mg/kg Source: HSDB
LC50 Inhalation - Rat (Dust/Mist)	≥ 5 mg/l Source: OSHRI GLP toxicity test
ATE CA (dust,mist)	1.5 mg/l/4h

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

Ferric ammonium citrate (1185-57-5)	
LD50 oral rat	> 2000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), Guideline: other:
LD50 dermal rabbit	> 7940 mg/kg Source: ECHA

Sodium cholate (361-09-1)	
LD50 oral	2400 mg/kg body weight Animal: mouse
ATE CA (oral)	2400 mg/kg body weight

Sodium deoxycholate (302-95-4)	
LD50 oral rat	1370 mg/kg (Rat, Oral)
ATE CA (oral)	1370 mg/kg body weight

Skin corrosion/irritation : Not classified.
pH: 7.1 – 7.5

Kaolin (1332-58-7)	
pH	4.5 Source: hsdb

Sodium pyruvate (113-24-6)	
pH	7 (10 %)

Ferric ammonium citrate (1185-57-5)	
pH	6 – 8 Source: ECHA

Sodium cholate (361-09-1)	
pH	8 – 9.5 (5 %)

Sodium deoxycholate (302-95-4)	
pH	7.5 – 9 (2 %)

Serious eye damage/irritation : Not classified
pH: 7.1 – 7.5

Kaolin (1332-58-7)	
pH	4.5 Source: hsdb

Sodium pyruvate (113-24-6)	
pH	7 (10 %)

Ferric ammonium citrate (1185-57-5)	
pH	6 – 8 Source: ECHA

Sodium cholate (361-09-1)	
pH	8 – 9.5 (5 %)

Sodium deoxycholate (302-95-4)	
pH	7.5 – 9 (2 %)

Respiratory or skin sensitization : May cause an allergic skin reaction.
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified

Ferric ammonium citrate (1185-57-5)	
NOAEL (animal/male, F0/P)	595.9 mg/kg body weight Animal: rat, Animal sex: male, Guideline: other:

STOT-single exposure : Not classified

Oxbile (Oxgall) (8008-63-7)	
STOT-single exposure	May cause respiratory irritation.

Ferric ammonium citrate (1185-57-5)	
STOT-single exposure	May cause respiratory irritation.

Sodium deoxycholate (302-95-4)	
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposure : Not classified
Aspiration hazard : Not classified

Harlequin® Chromogenic Agar for Salmonella Esterase (CASE)	
Viscosity, kinematic	Not applicable

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

Sodium deoxycholate (302-95-4)	
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.

D-(+)-Cellobiose (528-50-7)	
EC50 - Crustacea [1]	> 100 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	≈ 21.86 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	≈ 4.6 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)

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

Ferric ammonium citrate (1185-57-5)	
LC50 - Fish [1]	> 100 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Static system, Fresh water, Experimental value)

Ferric ammonium citrate (1185-57-5)	
LC50 - Fish [2]	> 100 mg/l Test organisms (species): other:
EC50 - Crustacea [1]	275 mg/l (48 h, Daphnia magna, Static system, Fresh water, Experimental value)
ErC50 algae	> 100 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Static system, Fresh water, Experimental value)
EC50 72h - Algae [1]	> 100 mg/l Test organisms (species): other:

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

Sodium deoxycholate (302-95-4)	
LC50 - Fish [1]	1592.185 mg/l Source: ECOSAR
EC50 96h - Algae [1]	968.709 mg/l Source: ECOSAR

12.2. Persistence and degradability

Harlequin® Chromogenic Agar for Salmonella Esterase (CASE)	
Persistence and degradability	Not rapidly degradable

Kaolin (1332-58-7)	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable (inorganic)
ThOD	Not applicable (inorganic)

Oxbile (Oxgall) (8008-63-7)	
Persistence and degradability	Not rapidly degradable

D-(+)-Cellobiose (528-50-7)	
Persistence and degradability	Biodegradability in water: no data available.

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

Ferric ammonium citrate (1185-57-5)	
Persistence and degradability	Readily biodegradable in water.

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

Sodium deoxycholate (302-95-4)	
Persistence and degradability	Biodegradability in water: no data available.

12.3. Bioaccumulative potential

Kaolin (1332-58-7)	
Bioaccumulative potential	No bioaccumulation data available.

D-(+)-Cellobiose (528-50-7)	
Bioaccumulative potential	Not bioaccumulative.
Partition coefficient n-octanol/water (Log Pow)	-5.03 (Estimated value)

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)

Ferric ammonium citrate (1185-57-5)	
Bioaccumulative potential	Not bioaccumulative.
Partition coefficient n-octanol/water (Log Pow)	-0.737 (Calculated, 25 °C)

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

Sodium deoxycholate (302-95-4)	
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
Partition coefficient n-octanol/water (Log Pow)	1.24 (Estimated value)

12.4. Mobility in soil

Kaolin (1332-58-7)	
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.

Ferric ammonium citrate (1185-57-5)	
Ecology - soil	No (test)data on mobility of the substance available.

Sodium cholate (361-09-1)	
Mobility in soil	1140 Source: Quantitative Structure Activity Relation
Ecology - soil	Highly mobile in soil.

Sodium deoxycholate (302-95-4)	
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			

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 73/78[9] and the IBC Code[10]

Not applicable

SECTION 15 Regulatory information

Oxbile (Oxgall) (8008-63-7)	
Listed on the Canadian DSL (Domestic Substances List)	
Canada DSL & NDSL Flags	Significant New Activity (SNAc) provisions of the Act apply

D-(+)-Cellobiose (528-50-7)	
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

Ferric ammonium citrate (1185-57-5)
Listed on the Canadian DSL (Domestic Substances List)

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

Sodium deoxycholate (302-95-4)	
Listed on the Canadian DSL (Domestic Substances List)	
Canada DSL & NDSL Flags	Significant New Activity (SNAc) provisions of the Act apply

Oxbile (Oxgall) (8008-63-7)
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active

D-(+)-Cellobiose (528-50-7)
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active

Sodium pyruvate (113-24-6)
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active

Ferric ammonium citrate (1185-57-5)
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active **Listed on INSQ (Mexican National Inventory of Chemical Substances)**

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)**

Sodium deoxycholate (302-95-4)
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active **Listed on INSQ (Mexican National Inventory of Chemical Substances)**

SECTION 16 Other Information

Issue date : 06-09-2025

Full text of hazard classes and H-statements:	
H302	Harmful if swallowed
H315	Causes skin irritation

Full text of hazard classes and H-statements:	
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H332	Harmful if inhaled
H335	May cause respiratory irritation
H401	Toxic to aquatic life
H402	Harmful to aquatic life
H411	Toxic to aquatic life with long lasting effects
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.