Thiosulfate Citrate Bile Salts Sucrose (TCBS) Agar

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)
Issue date: 05-13-2025 Version: 1.0

SECTION 1 Identification

1.1. GHS Product identifier

Product form	: Mixture
Trade name	: Thiosulfate Citrate Bile Salts Sucrose (TCBS) Agar
Type of product	: Food Safety -- [Food Safety]
Product code	: NCM0052

1.2. Other means of identification

Part Number(s) : NCM0052|400000769|700003105|700003106|700003107

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)

Not classified

2.2. GHS label elements, including precautionary statements

GHS CA labeling

No labeling applicable

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 thiosulfate, anhydrous	Sodium thiosulfate ametox (=sodium thiosulfate) / antichlor (=sodium thiosulfate) / chlorine control / chlorine cure / declor-IT / disodium thiosulfate / HYPO (=sodium thiosulfate) / prismatic rice / S-hydril / sodium hyposulfite / sodium hyposulphite / sodium oxide sulfide / sodium thiosulfate / sodium thiosulphate / sodothiol (=sodium thiosulfate) / sulfothiorine (=sodium thiosulfate) / thiosulfuric acid (H2-S2-O3), disodium salt / thiosulfuric acid disodium salt	CAS-No.: 7772-98-7	10.113	Acute Tox. 4 (Inhalation:dust,mist), H332
Oxbile (Oxgall)	-	CAS-No.: 8008-63-7	8.99	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335

Name	Chemical name / Synonyms	Product identifier	%	Classification (GHS CA)
Sodium carbonate	Sodium Carbonate anhydrous soda / ash / bisodium carbonate / calcined soda(=sodium carbonate) / carbonic acid sodium salt / carbonic-acid-disodium-salt- / CASWELL NO. 752 / chrystol carbonate / crystol carbonate (=sodium carbonate) / natural ash / Na-X / snowlite 1 / soda (=sodium carbonate) / soda ash / soda, crystals / sodium carbonate / sodium carbonate, anhydrous / sodium carbonate, anhydrous ASTM D458 / sodium carbonate, anhydrous GE materials D4D5 / sodium carbonate, anhydrous powder / sodium carbonate, crude / sodium carbonate, granular / Solvay soda / synthetic ash / washing soda (=sodiumcarbonate)	CAS-No.: 497-19-8	1.686	Eye Irrit. 2, H319

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	1.011	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.

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	:	None under normal conditions. Dust may cause irritation in skin folds or by contact in combination with tight clothing.
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. Wear personal protective equipment.

Hygiene measures : 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

Personal protective equipment symbol(s):

SECTION 9 Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state : Solid
Appearance : Powder.
Color : Light green Beige
Odor : Characteristic
Odor threshold : No data available

pH	:	8.4 – 8.8
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

Thiosulfate Citrate Bile Salts Sucrose (TCBS) Agar	
Unknown acute toxicity (GHS CA)	20.11% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral) 42.59% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal) 32.48% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))

Sodium thiosulfate, anhydrous (7772-98-7)	
LD50 oral rat	> 5000 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male / female, Read-across, Oral, 14 day(s))
LD50 dermal rabbit	> 2000 mg/kg body weight (Equivalent or similar to OECD 402, 24 h, Rabbit, Male / female, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat	> 2.6 mg/l (Equivalent or similar to OECD 403, 4 h, Rat, Male / female, Read-across, Inhalation (aerosol), 14 day(s))

Sodium thiosulfate, anhydrous (7772-98-7)	
ATE CA (dust,mist)	1.5 mg/l/4h

Sodium carbonate (497-19-8)	
LD50 oral rat	2800 mg/kg (Rat, Male / female, Experimental value of similar product, Hydrate form, Oral, 14 day(s))
LD50 oral	2800 mg/kg
LD50 dermal rabbit	> 2000 mg/kg (16 CFR 1500.40, 24 h, Rabbit, Experimental value of similar product, Hydrate form, Dermal, 14 day(s))
LD50 dermal	2500 mg/kg
LC50 Inhalation - Rat (Dust/Mist)	1.2 mg/l/4h
ATE CA (oral)	2800 mg/kg body weight
ATE CA (Dermal)	2500 mg/kg body weight
ATE CA (dust,mist)	1.2 mg/l/4h

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

Skin corrosion/irritation : Not classified.
pH: 8.4 – 8.8

Sodium thiosulfate, anhydrous (7772-98-7)	
pH	7.8 (10 %)

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

Serious eye damage/irritation : Not classified
pH: 8.4 – 8.8

Sodium thiosulfate, anhydrous (7772-98-7)	
pH	7.8 (10 %)

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

Respiratory or skin sensitization : Not classified

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

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

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

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

Thiosulfate Citrate Bile Salts Sucrose (TCBS) Agar	
Viscosity, kinematic	Not applicable

Sodium carbonate (497-19-8)	
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 : None under normal conditions. Dust may cause irritation in skin folds or by contact in combination with tight clothing.

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 thiosulfate, anhydrous (7772-98-7)	
LC50 - Fish [1]	510 mg/l (96 h, Lepomis macrochirus, Static system, Fresh water, Read-across, Lethal)
EC50 - Crustacea [1]	230 mg/l (48 h, Daphnia magna, Static system, Fresh water, Read-across, Locomotor effect)
EC50 72h - Algae [1]	> 100 mg/l (OECD 201: Alga, Growth Inhibition Test, Pseudokirchneriella subcapitata, Static system, Fresh water, Read-across, Growth rate)
NOEC chronic fish	≥ 316 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio) Duration: '34 d'
NOEC (chronic)	> 10 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

Sodium carbonate (497-19-8)	
LC50 - Fish [1]	300 mg/l (96 h, Lepomis macrochirus, Static system, Fresh water, Experimental value, Lethal)
EC50 - Crustacea [1]	200 – 227 mg/l (48 h, Ceriodaphnia sp., Semi-static system, Fresh water, Experimental value, Locomotor effect)
EC50 - Crustacea [2]	200 – 227 mg/l Test organisms (species): Ceriodaphnia sp.
EC50 96h - Algae [1]	242 mg/l Source: ECOTOX

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)
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:

12.2. Persistence and degradability

Thiosulfate Citrate Bile Salts Sucrose (TCBS) Agar	
Persistence and degradability	Not rapidly degradable

Sodium thiosulfate, anhydrous (7772-98-7)	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

Sodium carbonate (497-19-8)	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable (inorganic)
ThOD	Not applicable (inorganic)

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

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

12.3. Bioaccumulative potential

Sodium thiosulfate, anhydrous (7772-98-7)	
Bioaccumulative potential	No bioaccumulation data available.
Partition coefficient n-octanol/water (Log Pow)	-4.35 Source: International Chemical Safety Cards

Sodium carbonate (497-19-8)	
Bioaccumulative potential	Not bioaccumulative.
Partition coefficient n-octanol/water (Log Pow)	-6.19 Source: Quantitative Structure Activity Relation

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

12.4. Mobility in soil

Sodium carbonate (497-19-8)	
Surface tension	No data available in the literature
Ecology - soil	Low potential for adsorption in soil.

Ferric ammonium citrate (1185-57-5)	
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

Sodium thiosulfate, anhydrous (7772-98-7)	
Listed on the Canadian DSL (Domestic Substances List)	
Canada DSL & NDSL Flags	Significant New Activity (SNAc) provisions of the Act apply

Sodium carbonate (497-19-8)
Listed on the Canadian DSL (Domestic Substances List)

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

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

Thiosulfate Citrate Bile Salts Sucrose (TCBS) Agar
Not listed on the United States TSCA (Toxic Substances Control Act) inventory

Sodium thiosulfate, anhydrous (7772-98-7)
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active **Listed on INSQ (Mexican National Inventory of Chemical Substances)**

Sodium carbonate (497-19-8)
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active **Listed on INSQ (Mexican National Inventory of Chemical Substances)**

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)**

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

SECTION 16 Other Information

Issue date : 05-13-2025

Full text of hazard classes and H-statements:	
H315	Causes skin irritation
H319	Causes serious eye irritation
H332	Harmful if inhaled
H335	May cause respiratory irritation

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.