

SECTION 1 Identification

1.1. GHS Product identifier

Product form : Mixture
Trade name : XLT4 Agar
Type of product : Food Safety -- [Food Safety]
Product code : NCM0100

1.2. Other means of identification

Part Number(s) : NCM0100|400000805|700003251|700003252|700003253

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.

XLT4 Agar

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

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 thiosulfate, anhydrous | Sodium thiosulfate ametox (=sodium thiosulfate) / antichlor (=sodium thiosulfate) / chlorine control / chlorine cure / dechlor-IT / disodium thiosulfate / HYPO (=sodium thiosulfate) / prismatic rice / S-hydril / sodium hyposulfite / sodium hyposulphite / sodium oxide sulfide / sodium thiosulfate / sodium thiosulphate / sodochiol (=sodium thiosulfate) / sulfothiorine (=sodium thiosulfate) / thiosulfuric acid (H ₂ -S ₂ -O ₃), disodium salt / thiosulfuric acid disodium salt | CAS-No.: 7772-98-7 | 9.297 | Acute Tox. 4 (Inhalation:dust,mist), H332 |

XLT4 Agar

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

| 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 | 1.352 | Eye Irrit. 2A, H319 STOT SE 3, H335 |

XLT4 Agar

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

| Name | Chemical name / Synonyms | Product identifier | % | Classification (GHS CA) |
|------------|---|--------------------|-------|---|
| Phenol red | 4,4'-(3H-2,1-benzoxathiol-3-ylidene)bisphenol S,S-dioxide ; Phenol red 3,3-bis(p-hydroxyphenyl)-3H-2,1-benzoxathiole 1,1-dioxide / 4,4'-(3H-2,1-benzoxathiol-3-ylidene)bisphenol S,S-dioxide / 4,4'-(3H-2,1-benzoxathiol-3-ylidene)diphenol S,S-dioxide / alpha-hydroxy-alpha,alpha-bis(p-hydroxyphenyl)-o-toluenesulfonic acid gamma-sultone / fenolipuna / indicator phenol red / phenol red / phenol, 4,4'-(3H-2,1-benzoxathiol-3-ylidene)bis-, S,S-dioxide / phenol, 4,4'-(3H-2,1-benzoxathiol-3-ylidene)di-, S,S-dioxide / phenolsulfonepht halein / phenolsulfonphthalein / phenolsulphonpht halein / PR(=phenol red) / PSP / PSP (indicator) / sulfonphthal / sulphental / sulphonthal | CAS-No.: 143-74-8 | 0.135 | Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317 STOT SE 3, H335 Aquatic Acute 2, H401 Aquatic Chronic 2, H411 |

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

XLT4 Agar

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

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. |

XLT4 Agar

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

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

XLT4 Agar

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

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 Pink |
| Odor | : Characteristic |
| Odor threshold | : No data available |
| pH | : 7.2 – 7.6 |
| 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 |

XLT4 Agar

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

| XLT4 Agar | |
|--|---|
| Unknown acute toxicity (GHS CA) | 16.57% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral) 46.99% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal) 37.7% 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)) |
| ATE CA (dust,mist) | 1.5 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: 7.2 – 7.6 |
| 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: 7.2 – 7.6 |
| 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 | : 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 |
| Ferric ammonium citrate (1185-57-5) | |
| STOT-single exposure | May cause respiratory irritation. |
| Phenol red (143-74-8) | |
| STOT-single exposure | May cause respiratory irritation. |
| STOT-repeated exposure | : Not classified |
| Aspiration hazard | : Not classified |

XLT4 Agar

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

| XLT4 Agar | |
|-------------------------------------|---|
| Viscosity, kinematic | Not applicable |
| 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 thiosulfate, anhydrous (7772-98-7) | |
|---|--|
| LC50 - Fish [1] | 510 mg/l (96 h, <i>Lepomis macrochirus</i> , Static system, Fresh water, Read-across, Lethal) |
| EC50 - Crustacea [1] | 230 mg/l (48 h, <i>Daphnia magna</i> , Static system, Fresh water, Read-across, Locomotor effect) |
| EC50 72h - Algae [1] | > 100 mg/l (OECD 201: Alga, Growth Inhibition Test, <i>Pseudokirchneriella subcapitata</i> , Static system, Fresh water, Read-across, Growth rate) |
| NOEC chronic fish | ≥ 316 mg/l Test organisms (species): <i>Danio rerio</i> (previous name: <i>Brachydanio rerio</i>) Duration: '34 d' |
| NOEC (chronic) | > 10 mg/l Test organisms (species): <i>Daphnia magna</i> Duration: '21 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) |
| LC50 - Fish [2] | > 100 mg/l Test organisms (species): other: |
| EC50 - Crustacea [1] | 275 mg/l (48 h, <i>Daphnia magna</i> , 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: |

| Phenol red (143-74-8) | |
|-----------------------|---------------------------|
| LC50 - Fish [1] | 12.25 mg/l Source: ECOSAR |
| EC50 96h - Algae [1] | 1.262 mg/l Source: ECOSAR |

12.2. Persistence and degradability

| XLT4 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 |

XLT4 Agar

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

| Sodium thiosulfate, anhydrous (7772-98-7) | |
|---|-------------------------------------|
| ThOD | Not applicable |
| BOD (% of ThOD) | Not applicable |
| Ferric ammonium citrate (1185-57-5) | |
| Persistence and degradability | Readily biodegradable in water. |
| Phenol red (143-74-8) | |
| Persistence and degradability | Not readily biodegradable in water. |

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 |
| Ferric ammonium citrate (1185-57-5) | |
| Bioaccumulative potential | Not bioaccumulative. |
| Partition coefficient n-octanol/water (Log Pow) | -0.737 (Calculated, 25 °C) |
| Phenol red (143-74-8) | |
| Bioaccumulative potential | Low potential for bioaccumulation (Log Kow < 4). |
| BCF - Fish [1] | 45.67 l/kg (BCFBAF v3.01, Calculated value, Fresh weight) |
| Partition coefficient n-octanol/water (Log Pow) | 3.02 (Experimental value) |

12.4. Mobility in soil

| Ferric ammonium citrate (1185-57-5) | |
|--|---|
| Ecology - soil | No (test)data on mobility of the substance available. |
| Phenol red (143-74-8) | |
| Ecology - soil | Adsorbs into the soil. |
| Organic Carbon Normalized Adsorption Coefficient (Log Koc) | 5.329 (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. |

XLT4 Agar

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

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 73/78⁹ and the IBC Code¹⁰

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

Ferric ammonium citrate (1185-57-5)

Listed on the Canadian DSL (Domestic Substances List)

Phenol red (143-74-8)

Listed on the Canadian DSL (Domestic Substances List)

Canada DSL & NDSL Flags

Significant New Activity (SNAc) provisions of the Act apply

XLT4 Agar

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

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)

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)

Phenol red (143-74-8)

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 : 06-02-2025

Full text of hazard classes and H-statements:

| | |
|------|---|
| H315 | Causes skin irritation |
| H317 | May cause an allergic skin reaction |
| H319 | Causes serious eye irritation |
| H332 | Harmful if inhaled |
| H335 | May cause respiratory irritation |
| H401 | Toxic to aquatic life |
| 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.