Revive Medium

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)
Issue date: 08-22-2025 Revision date: 02-03-2026 Supersedes: 08-22-2025 Version: 2.0

SECTION 1 Identification

1.1. GHS Product identifier

Product form	: Mixture
Trade name	: Revive Medium
Type of product	: Food Safety -- [Food Safety]
Product code	: 9022

1.2. Other means of identification

Part Number(s) : 9022|9705|9708|400000053|400000559|700002794|700002797

1.3. Recommended use of the chemical and restrictions on use

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

1.4. Supplier's details

Manufacturer
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 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.
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)

Tween 80	(Z)-Mono-9-octadecenoate sorbitan poly(oxy-1,2-ethanediyl) derivs. ; Polyoxyethylene sorbitan monooleate alkamuls PSMO 20 / armotan PMO-20 / atlox 1087 / atlox 8916TF / capmul POE-O / cemerol T 80 / cemesol TW 1020 / crill 10 / crill 11 / crill S 10 / crillet 4 / crillet 41 / disponil SMO 120 / drewmulse POE-SMO / durfax 80 / emsorb 6900 / emulgin SMO 20 / emulson 100M / ethoxylated sorbitan monooleate / ethylene oxide-sorbitan mono-oleate polymer / flo Mo SMO 20 / glycols, polyethylene, ether with sorbitan monooleate / glycosperse O 5 / glycosperse O-20 / glycosperse O-20 VEG / glycosperse O-20X / hexaethylene glycol sorbitan monoleate / hodag SVO 9 / ionet T80 / ionet T80C / liposorb O-20 / liposord L-20 / MO 55F / monitan / montanox 80 / nikkol TO / nikkol TO 10 / nikkol TO 106 / nikkol TO 10M / nissan	CAS-No.: 9005-65-6	≥ 1 – < 5	Aquatic Acute 3, H402 Aquatic Chronic 3, H412

	nonion OT 221 / nonion OT 221 / olothorb / polyethylene glycol sorbitan ether monooleate / polyethylene glycol sorbitan monooleate / polyethylene oxide sorbitan mono-oleate / polyoxyethylated sorbitan monooleate / polyoxyethylene (20) sorbitan monooleate / polyoxyethylene monosorbitan monooleate / polyoxyethylene sorbitan oleate / polyoxyethylene sorbitanmonooolea te / polyoxyethylene(2 0)sorbitan monooleate / protasorb O-20 / PST40200 / rheodol super TW-O120 / rheodol TW-L 80 / rheodol TW-O 106 / rheodol TW-O 120 / romulgin O / setrolene O / sorbimacrogol oleate / sorbimacrogol oleate 300 / sorbital 0 20 / sorbitan mono-9-octadecenoate poly(oxy-1,2-ethanediyl) derives / sorbitan monoleate / sorbitan monooleate ethylene oxide adduct / sorbitan monooleate polyethylene glycol ether / sorbitan mono-			

Name	Chemical name / Synonyms	Product identifier	%	Classification (GHS CA)
	oleate polyoxyethylene / sorbitan monooleate polyoxyethylene derivatives / sorbitan monooleate polyoxyethylene ether / Sorbitan monooleate, ethoxylated / sorbitan oleate-ethylene oxide adduct / sorbitan, mono-9-octadecenoate, poly(oxy-1,2-ethanediyl) der / sorbitan, monooleate, polyoxyethylene derivs. / sorbon T 80 / sorethytan (20) mono-oleate / sorgen TW 80 / sorlate / SVO 9 / T-164 / TO 10 / TO 10M / tris(polyoxyethylene)sorbitan monooleate / TWEEN 18:1c / TWEEN 81 / TWEEN 81 (polysorbate 81) / witconol 2722			
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 – < 5	Eye Irrit. 2, H319 Skin Sens. 1B, H317

Name	Chemical name / Synonyms	Product identifier	%	Classification (GHS CA)
Sodium thioglycollate	Thioglycolic acid sodium salt acetic acid, mercapto-, monosodium salt / mercaptoacetic acid, monosodium salt / mercaptoacetic acid, sodium salt / NaTG / sodium mercaptoacetate / sodium thioglycollate / thioglycolic acid, sodium salt / USAF EK5199	CAS-No.: 367-51-1	≥ 0.1 – < 0.5	Met. Corr. 1, H290 Acute Tox. 3 (Oral), H301 Acute Tox. 4 (Dermal), H312 Skin Sens. 1, H317 Aquatic Chronic 3, H412

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.
Personal protection for first-aid responders. : First aid workers will be equipped with suitable personal protective equipment.

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 – 30 °C
Packaging materials	:	Always store 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	:	Beige
Odor	:	Characteristic
Odor threshold	:	No data available
pH	:	6.9 – 7.3
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

Revive Medium	
Unknown acute toxicity (GHS CA)	40.22% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral) 61.42% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal) 61.42% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))

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

Sodium thioglycollate (367-51-1)	
LD50 oral rat	50 – 200 mg/kg body weight (OECD 423: Acute Oral Toxicity – Acute Toxic Class Method, Rat, Male / female, Experimental value, Oral, 15 day(s))
LD50 dermal rat	1000 – 2000 mg/kg body weight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Female, Experimental value, Dermal, 14 day(s))
ATE CA (oral)	50 mg/kg body weight
ATE CA (Dermal)	1000 mg/kg body weight

Skin corrosion/irritation : Not classified.
pH: 6.9 – 7.3

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

Sodium thioglycollate (367-51-1)	
pH	7 (609.1 g/l, 20 °C, OECD 105: Water Solubility)

Tween 80 (9005-65-6)	
pH	5 – 7 (5 %)

Serious eye damage/irritation : Not classified
pH: 6.9 – 7.3

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

Sodium thioglycollate (367-51-1)	
pH	7 (609.1 g/l, 20 °C, OECD 105: Water Solubility)

Tween 80 (9005-65-6)	
pH	5 – 7 (5 %)

Respiratory or skin sensitization : May cause an allergic skin reaction.
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : Not classified
STOT-repeated exposure : Not classified

Sodium thioglycollate (367-51-1)	
LOAEL (oral,rat,90 days)	60 mg/kg body weight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
LOAEL (dermal,rat/rabbit,90 days)	11.25 mg/kg body weight Animal: rat, Guideline: other:, Guideline: OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study)
NOAEL (oral,rat,90 days)	20 mg/kg body weight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEL (dermal,rat/rabbit,90 days)	≥ 180 mg/kg body weight Animal: rat, Guideline: other:, Guideline: OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study)

Aspiration hazard : Not classified

Revive Medium	
Viscosity, kinematic	Not applicable

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

Sodium thioglycollate (367-51-1)	
Viscosity, kinematic	Not applicable (solid)

Tween 80 (9005-65-6)	
Viscosity, kinematic	462.963 – 46648.148 mm²/s

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 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'

Sodium thioglycollate (367-51-1)	
LC50 - Fish [1]	> 100 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Flow-through system, Fresh water, Read-across, GLP)
EC50 - Crustacea [1]	47 mg/l (48 h, Daphnia magna, Experimental value, Locomotor effect)
EC50 - Other aquatic organisms [1]	47.31 mg/l Test organisms (species):
ErC50 algae	5.1 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Read-across, GLP)
EC50 72h - Algae [1]	5.07 mg/l Test organisms (species):
NOEC (chronic)	3.9 mg/l Test organisms (species): Duration: '21 d'

Tween 80 (9005-65-6)	
LC50 - Fish [1]	817.89 mg/l Source: ECOSAR
EC50 96h - Algae [1]	62.072 mg/l Source: ECOSAR

12.2. Persistence and degradability

Revive Medium	
Persistence and degradability	Not rapidly degradable

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

Sodium thioglycollate (367-51-1)	
Persistence and degradability	Readily biodegradable in water.

Tween 80 (9005-65-6)	
Persistence and degradability	Biodegradability in water: no data available.

12.3. Bioaccumulative potential

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)

Sodium thioglycollate (367-51-1)	
Bioaccumulative potential	Not bioaccumulative.

Sodium thioglycollate (367-51-1)	
Partition coefficient n-octanol/water (Log Pow)	-3 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 22 °C)

Tween 80 (9005-65-6)	
Bioaccumulative potential	No bioaccumulation data available.

12.4. Mobility in soil

Sodium pyruvate (113-24-6)	
Surface tension	No data available in the literature
Ecology - soil	No (test)data on mobility of the substance available.

Sodium thioglycollate (367-51-1)	
Surface tension	No data available in the literature
Ecology - soil	Highly mobile in soil.
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.16 (log Koc, SRC PCKOCWIN v2.0, QSAR)

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.

Ecological waste information : The waste of the product should be considered as hazardous as the product itself, with the likelihood of impacting the environment in the same way. Consider the handling and disposal of the waste as defined by the product itself.

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

TDG	DOT	IMDG	IATA
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 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

Tween 80 (9005-65-6)
Listed on the Canadian DSL (Domestic Substances List)

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

Tween 80 (9005-65-6)
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 : 08-22-2025
Revision date : 02-03-2026
Supersedes : 08-22-2025

Full text of hazard classes and H-statements:	
H290	May be corrosive to metals
H301	Toxic if swallowed

Full text of hazard classes and H-statements:	
H312	Harmful in contact with skin
H317	May cause an allergic skin reaction
H319	Causes serious eye 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.