LESS Medium

Safety Data Sheet

according to the WHS Regulations

Issue date: 22/08/2025 Revision date: 30/09/2025 Supersedes: 22/08/2025 Version: 2.0

SECTION 1: Product identifier

1.1. GHS Product identifier

Product form : Mixture

Product name : LESS Medium

Product code : 9790

1.2. Other means of identification

Part Number(s) : 9790|9792E|9798|400000055|400000056|400000648|700002820|700002821|700002822

1.3. Recommended use of the chemical and restrictions on use

Recommended use : Laboratory chemicals
Scientific research and development

1.4. Details of manufacturer or importer

Manufacturer
Neogen Corporation
620 Lesher Place
Lansing Michigan 48912
United States of America
T 800.234.5333
sds@neogen.com - https://www.neogen.com/

Importer
Neogen Australasia Pty Ltd
14 Hume Drive
Bundamba Queensland 4304
Australia
T 07 3736 2134
naa@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)

Country/Area	Organisation/Company	Address	Emergency number	Comment
Australia	NSW Poisons Information Centre The Children's Hospital at Westmead	Locked Bag 4001 NSW 2145 Westmead	13 11 26	

SECTION 2: Hazard identification

2.1. Classification of the hazardous chemical

Classification according to the model Work Health and Safety Regulations (WHS Regulations)

Acute toxicity (oral), Category 5	H303
Acute toxicity (dermal), Category 5	H313
Serious eye damage/eye irritation, Category 2A	H319
Skin sensitisation, Category 1	H317

2.2. GHS Label elements, including precautionary statements

Hazard pictograms (GHS AU) :

Exclamation mark

Signal word (GHS AU) : Warning

Contains	:	Peptones, casein (≥ 15 – < 25 %); MOPS Sodium Salt (≥ 15 – < 25 %); Sodium pyruvate (≥ 10 – < 15 %); 3-Morpholinopropanesulfonic acid (≥ 10 – < 15 %); Sodium chloride (≥ 5 – < 10 %); Magnesium sulfate anhydrous (≥ 5 – < 10 %); Potassium phosphate dibasic anhydrous (≥ 1 – < 5 %)
Hazard statements (GHS AU)	:	H303+H313 - May be harmful if swallowed or in contact with skin H317 - May cause an allergic skin reaction H319 - Causes serious eye irritation
Precautionary statements (GHS AU)	:	P261 - Avoid breathing dust/fume/gas/mist/vapours/spray. P264 - Wash hands, forearms and face thoroughly after handling. P272 - Contaminated work clothing should not be allowed out of the workplace. P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing protection. P302+P352 - IF ON SKIN: Wash with plenty of water. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P312 - Call a POISON CENTER or doctor if you feel unwell. P321 - Specific treatment (see supplemental first aid instruction on this label). P333+P313 - If skin irritation or rash occurs: Get medical advice/attention. P337+P313 - If eye irritation persists: Get medical advice/attention. P362+P364 - Take off contaminated clothing and wash it before reuse. P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
Unknown acute toxicity (GHS AU)	:	11.45% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral) 77.24% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal) 99.49% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))

2.3. Other hazards which do not result in classification

No additional information available

SECTION 3: Composition and information on ingredients

Name	CAS-No.	%	Classification according to the model Work Health and Safety Regulations (WHS Regulations)
Sodium pyruvate	113-24-6	≥ 10 – < 15	Acute Tox. 5 (Oral), H303 Acute Tox. 5 (Dermal), H313 Skin Sens. 1B, H317
3-Morpholinopropanesulfonic acid	1132-61-2	≥ 10 – < 15	Acute Tox. 5 (Oral), H303 Skin Corr./Irrit. Not classified Eye Irrit. 2A, H319 Skin Sens. 1, H317 STOT SE 3, H335
Other substances (not contributing to the classification of this product)	-	70 – 80	-

SECTION 4: First aid measures

4.1. Description of necessary first-aid measures

First-aid measures general	:	Call a poison center or a doctor if you feel unwell.
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 cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	:	Rinse mouth. Call a poison center or a doctor if you feel unwell.
Self protection of the first-aider	:	First aid workers will be equipped with suitable personal protective equipment.

4.2. Symptoms caused by exposure

Symptoms/effects after inhalation : None under normal conditions. Dust of the product, if present, may cause respiratory irritation after excessive inhalation exposure.
Symptoms/effects after skin contact : May be harmful in contact with skin. May cause an allergic skin reaction.
Symptoms/effects after eye contact : Eye irritation.
Symptoms/effects after ingestion : May be harmful if swallowed.

4.3. Medical attention and special treatment

Other medical advice or treatment : Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. 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.
General measures : Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage.
Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective equipment and precautions 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.

6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.
Emergency procedures : Ventilate spillage area. Avoid contact with skin, eyes and clothing. Avoid breathing dust/fume/gas/mist/vapours/spray.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures : Evacuate unnecessary personnel.

6.2. Environmental precautions

Avoid release to the environment.

6.3. 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.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	:	Ensure good ventilation of the work station. Do not get in eyes, on skin, or on clothing. Wear personal protective equipment. Avoid breathing dust/fume/gas/mist/vapours/spray.
Hygiene measures	:	Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. 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	:	15 – 30 °C
Packaging materials	:	Store always product in container of same material as original container.

SECTION 8: Exposure controls and personal protection

8.1. Control parameters - exposure standards

No additional information available

8.2. Monitoring methods

No additional information available

8.3. Engineering controls

Appropriate engineering controls	:	Ensure good ventilation of the work station.

8.4. 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)

Environmental exposure controls	:	Avoid release to the environment.

SECTION 9: Physical and chemical properties

Physical state	:	Solid
Appearance	:	Powder.
Colour	:	Beige
Odour	:	Characteristic
Odour threshold	:	No data available
pH	:	7 – 7.4
pH solution	:	No data available
Relative evaporation rate (butylacetate=1)	:	No data available
Melting point / Freezing point	:	Freezing point: Not applicable
Boiling point	:	No data available
Flash point	:	Not applicable
Auto-ignition temperature	:	Not applicable
Flammability	:	No data available
Vapour pressure	:	No data available
Relative density	:	No data available

Density	:	No data available
Solubility	:	Soluble in water.
Partition coefficient n-octanol/water (Log Pow)	:	No data available
Viscosity, kinematic	:	Not applicable
Explosive properties	:	No data available
Explosive limits	:	Not applicable
Minimum ignition energy	:	No data available
Fat solubility	:	No data 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.

SECTION 11: Toxicological information

Acute toxicity (oral)	:	May be harmful if swallowed.
Acute toxicity (dermal)	:	May be harmful in contact with skin.
Acute toxicity (inhalation)	:	Not classified

LESS Medium	
ATE AU (oral)	2960.496 mg/kg bodyweight
ATE AU (dermal)	2557.329 mg/kg bodyweight

Sodium pyruvate (113-24-6)	
LD50 oral	3533 mg/kg bodyweight (Mouse, Experimental value, Oral)
LD50 dermal rat	> 3000 mg/kg bodyweight (Rat, Male, Experimental value, Intraperitoneal)

3-Morpholinopropanesulfonic acid (1132-61-2)	
LD50 oral rat	> 2000 mg/kg bodyweight (OECD 423: Acute Oral Toxicity – Acute Toxic Class Method, Rat, Male / female, Experimental value, Oral)

Unknown acute toxicity (GHS AU)	:	11.45% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral) 77.24% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal) 99.49% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))
Skin corrosion/irritation	:	Not classified. pH: 7 – 7.4
Serious eye damage/irritation	:	Causes serious eye irritation. pH: 7 – 7.4
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

3-Morpholinopropanesulfonic acid (1132-61-2)	
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposure	:	Not classified

3-Morpholinopropanesulfonic acid (1132-61-2)	
NOAEL (oral, rat, 90 days)	1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test), Guideline: other:

Aspiration hazard : Not classified

LESS Medium	
Viscosity, kinematic	Not applicable

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

SECTION 12: Ecological information

12.1. Ecotoxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor 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)
NOEC (chronic)	3.95 mg/l Test organisms (species): Duration: '28 d'
Partition coefficient n-octanol/water (Log Pow)	-3.8 (Practical experience/observation, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 20 °C)
LD50 dermal rat	> 3000 mg/kg bodyweight (Rat, Male, Experimental value, Intraperitoneal)

3-Morpholinopropanesulfonic acid (1132-61-2)	
LC50 - Fish [1]	> 1000 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
EC50 - Crustacea [1]	> 1000 mg/l Test organisms (species): Daphnia magna
Partition coefficient n-octanol/water (Log Pow)	-2.58 (Estimated value, KOWWIN)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
LD50 oral rat	> 2000 mg/kg bodyweight (OECD 423: Acute Oral Toxicity – Acute Toxic Class Method, Rat, Male / female, Experimental value, Oral)

12.2. Persistence and degradability

LESS Medium	
Persistence and degradability	Not rapidly degradable

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

3-Morpholinopropanesulfonic acid (1132-61-2)	
Persistence and degradability	Not readily biodegradable in water.

12.3. Bioaccumulative potential

Sodium pyruvate (113-24-6)	
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 pyruvate (113-24-6)	
Bioaccumulative potential	Not bioaccumulative.

3-Morpholinopropanesulfonic acid (1132-61-2)	
Partition coefficient n-octanol/water (Log Pow)	-2.58 (Estimated value, KOWWIN)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Bioaccumulative potential	Not bioaccumulative.

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.
Partition coefficient n-octanol/water (Log Pow)	-3.8 (Practical experience/observation, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 20 °C)

3-Morpholinopropanesulfonic acid (1132-61-2)	
Ecology - soil	Highly mobile in soil.
Partition coefficient n-octanol/water (Log Pow)	-2.58 (Estimated value, KOWWIN)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1 (log Koc, SRC PCKOCWIN v2.0, Calculated value)

12.5. Other adverse effects

Ozone : Not classified
Other adverse effects : No additional information available

LESS Medium	
Fluorinated greenhouse gases	False

Sodium pyruvate (113-24-6)	
Fluorinated greenhouse gases	False

3-Morpholinopropanesulfonic acid (1132-61-2)	
Fluorinated greenhouse gases	False

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 ADG / IMDG / IATA

ADG	IMDG	IATA
14.1. UN number		
Not regulated for transport		

ADG	IMDG	IATA
14.2. UN Proper Shipping Name		
Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)		
Not regulated	Not regulated	Not regulated
14.4. Packing group		
Not regulated	Not regulated	Not regulated
14.5. Environmental hazards		
Not regulated	Not regulated	Not regulated

14.6. Special precautions for user

Specific storage requirement : No data available
Shock sensitivity : No data available

14.7. Additional information

Other information : No supplementary information available

Transport by road and rail
Not regulated

Transport by sea
Not regulated

Air transport
Not regulated

14.8. Hazchem or Emergency Action Code

Hazchem Code : Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations

Australian Industrial Chemicals Introduction Scheme (AICIS)
Australian Inventory of Industrial Chemicals (AICIS Inventory) status : Contains substance(s) listed on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)
No additional information available
Australian Pesticides and Veterinary Medicines Authority (APVMA)
No additional information available

15.2. International agreements

No additional information available

SECTION 16: Other information

Revision date : 30/09/2025

Classification	
Acute Tox. 5 (Oral)	H303
Acute Tox. 5 (Dermal)	H313
Eye Irrit. 2A	H319

Classification	
Skin Sens. 1	H317

Full text of H-statements	
Acute Tox. 5 (Dermal)	Acute toxicity (dermal), Category 5
Acute Tox. 5 (Oral)	Acute toxicity (oral), Category 5
Eye Irrit. 2A	Serious eye damage/eye irritation, Category 2A
Skin Corr./Irrit. Not classified	Skin corrosion/irritation Not classified
Skin Sens. 1	Skin sensitisation, Category 1
Skin Sens. 1B	Skin sensitisation, category 1B
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation
H303	May be harmful if swallowed
H313	May be harmful in contact with skin
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H335	May cause respiratory irritation

Safety Data Sheet (SDS), Australia

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.