Effective date: 28/10/24	Hy-Labs Cat. No: TT-130	**MSDS FORMAT**	hy-labs
Doc. No: **MSDS-TT-130**		**MATERIAL SAFETY DATA SHEET**	Replace Doc: NA

1- Product and Company Identification

Product Name	**Selenite Broth**
Reference number	**TT-130**
Manufacturer	**Hy-Laboratories Ltd.** Park Tamar, Rehovot, 76326, Israel Tel: 972-8-9366475 Fax: 972-8-9366474

2- Hazards identification

Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2020/878.

Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet

Hazard classification and indication:

Acute toxicity, category 4	H302	Harmful if swallowed.
Acute toxicity, category 4	H332	Harmful if inhaled.
Specific target organ toxicity - repeated exposure, category 2	H373	

May cause damage to organs through prolonged or repeated exposure.

Hazardous to the aquatic environment, chronic toxicity, category 2 H411

Toxic to aquatic life with long lasting effects

Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms:

Signal words: Warning

Hazard statements:

H302+H332	Harmful if swallowed or if inhaled.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.

Precautionary statements:

P273	Avoid release to the environment.
P391	Collect spillage.
P261	Avoid breathing dust / fume / gas / mist / vapours / spray.
P312	Call a POISON CENTRE / doctor / . . . if you feel unwell.
P264	Wash . . . thoroughly after handling.

Contains: SODIUM SELENITE ACID

Other hazards

On the basis of available data, the product does not contain any PBT or vPvB in percentage ≥ than 0,1%.

The product does not contain substances with endocrine disrupting properties in concentration >= 0.1%

3- Hazard Specifications

Mixtures

Contains:

Identification x = Conc. % Classification (EC) 1272/2008 (CLP)

SODIUM SELENITE ACID

CAS 7782-82-3 $16,5 \leq x < 18$

Acute Tox. 3 H301, Acute Tox. 3 H331, STOT RE 2 H373, Aquatic Chronic 1 H410 M=1
EC 231-966-3 STA Oral: 100 mg/kg, STA Inhalation mists/powders: 0,501 mg/l
INDEX 034-002-00-8
The full wording of hazard (H) phrases is given in section 16.

4- First Aid Measures

Description of first aid measures

EYES:

Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.

SKIN:

Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention immediately. Wash contaminated clothing before using it again.

INHALATION:

Remove to open air. If the subject stops breathing, administer artificial respiration. Get medical advice/attention immediately.

INGESTION:

Get medical advice/attention immediately. Do not induce vomiting. Do not administer anything not explicitly authorised by a doctor.

Most important symptoms and effects, both acute and delayed

Specific information on symptoms and effects caused by the product are unknown.

Indication of any immediate medical attention and special treatment needed

Information not available

5- Fire Fighting Measures

Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

UNSUITABLE EXTINGUISHING EQUIPMENT

None in particular.

Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Do not breathe combustion products. The product is combustible and, when the powder is released into the air in sufficient concentrations and in the presence of a source of ignition, it can create explosive mixtures with air. Fires may start or get worse by leakage of the solid product from the container, when it reaches high temperatures or through contact with sources of ignition.

Advice for firefighters

GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

6- Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

If there are no contraindications, spray powder with water to prevent the formation of dust.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures

Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water

Methods and material for containment and cleaning up

Collect the leaked product and place it in containers for recovery or disposal. If there are no contraindications, use jets of water to eliminate product residues.

Make sure the leakage site is well aired. Evaluate the compatibility of the container to be used, by checking section 10. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

7- Handling and Storage

Precautions for safe handling

Before handling the product, consult all the other sections of this material safety data sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat.

Conditions for safe storage, including any incompatibilities

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Keep containers away from any incompatible materials, see section 10 for details

Specific end use(s)

Information not available

Storage 2-8 ^{o}C

8- Exposure Controls, Personal Protection

Control parameters

During the risk assessment process, it is essential to take into consideration the ACGIH occupational exposure levels for inert particulate not otherwise classified (PNOC respirable fraction: 3 mg/m3; PNOC inhalable fraction: 10 mg/m3). For values above these limits, use a P type filter, whose class (1, 2 or 3) must be chosen according to the outcome of risk assessment

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.
When choosing personal protective equipment, ask your chemical substance supplier for advice.
Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Exposure levels must be kept as low as possible to avoid significant build-up in the organism.
Manage personal protective equipment so as to guarantee maximum protection (e.g. reduction in replacement times).

HAND PROTECTION In the case of prolonged contact with the product, protect the hands with penetration-resistant work gloves (see standard EN 374). Work glove material must be chosen according to the use process and the products that may form. Latex gloves may cause sensitivity reactions.

SKIN PROTECTION Wear category II professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

EYE PROTECTION Wear airtight protective goggles (see standard EN 166). In the presence of risks of exposure to splashes or squirts during work, adequate mouth, nose and eye protection should be used to prevent accidental absorption.

RESPIRATORY PROTECTION Use a type P filtering facemask, whose class (1, 2 or 3) and effective need, must be defined according to the outcome of risk assessment (see standard EN 149).

ENVIRONMENTAL EXPOSURE CONTROLS The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards. Product residues must not be indiscriminately disposed of with waste water or by dumping in waterways.

9- Physical and Chemical Properties

Form Liquid
Color Very light Amber
Odure Characteristic

Melting point / freezing point		Not available
Initial boiling point		Not applicable
Flammability		Not available
Lower explosive limit		Not available
Upper explosive limit		Not available
Flash point		Not applicable
Auto-ignition temperature		Not available
pH	6,9 - 7,1	Temperature: 25 °C
Kinematic viscosity		Not available
Solubility		Not available
Partition coefficient: n-octanol/water		Not available
Vapour pressure		Not available

Density and/or relative density	Not available
Relative vapour density	Not available
Particle characteristics	Not available

Other information

Information with regard to physical hazard classes	Information not available
Other safety characteristics	Information not available

10- Stability and Reactivity

Reactivity

There are no particular risks of reaction with other substances in normal conditions of use

Hazardous decomposition products

No dangerous recrtons known.

11- Toxicological Information

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.

It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

Information on hazard classes as defined in Regulation (EC) No 1272/2008

Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

Information not available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Information not available

Interactive effects

Information not available

ACUTE TOXICITY

ATE(Inhalation - mists / powders) of the mixture: 2,8 mg/l

ATE (Oral) of the mixture: 555,56 mg/kg

ATE (Dermal) of the mixture: Not classified (no significant component)

SODIUM SELENITE ACID

LD50 (Oral):

2,5 mg/kg RAT

STA (Oral):

100 mg/kg estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)

SKIN CORROSION / IRRITATION

Does not meet the classification criteria for this hazard class

SERIOUS EYE DAMAGE / IRRITATION

Does not meet the classification criteria for this hazard class

RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

Respiratory sensitization

Information not available

Skin sensitization

Information not available

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

Adverse effects on sexual function and fertility

Information not available

Adverse effects on development of the offspring

Information not available

Effects on or via lactation

Information not available

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

Target organ

Information not available

Route of exposure

Information not available

STOT - REPEATED EXPOSURE

May cause damage to organs

Target organ

Information not available

Route of exposure

Information not available

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

Information on other hazards

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with human health effects under evaluation

12- Ecological Information

This product is dangerous for the environment and is toxic for aquatic organisms. In the long term, it have negative effects on acquatic environment.

Toxicity	Information not available
Persistence and degradability	Information not available
Bioaccumulative potential	Information not available
Mobility in soil	Information not available

Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage ≥ than 0,1%.

Endocrine disrupting properties

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with environmental effects under evaluation.

Other adverse effects Information not available

13- Disposal Information

Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations. Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations. Waste transportation may be subject to ADR restrictions.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

14- Transport Information

UN number or ID number

ADR / RID, IMDG, IATA: 2811

UN proper shipping name

ADR / RID: TOXIC SOLID, ORGANIC, N.O.S. (SODIUM SELENITE ACID)
IMDG: TOXIC SOLID, ORGANIC, N.O.S. (SODIUM SELENITE ACID)
IATA: TOXIC SOLID, ORGANIC, N.O.S. (SODIUM SELENITE ACID)

Transport hazard class(es)

ADR / RID: Class: 6.1 Label: 6.1 

IMDG: Class: 6.1 Label: 6.1 

IATA: Class: 6.1 Label: 6.1 

Packing group
ADR / RID, IMDG, IATA: II
Environmental hazards

ADR / RID: Environmentally Hazardous 

IMDG: Marine Pollutant 

IATA: NO
For Air transport, environmentally hazardous mark is only mandatory for UN 3077 and UN 3082.
Special precautions for user
ADR / RID:
HIN - Kemler: 60 Limited Quantities: 0,5 kg Tunnel restriction code: (D/E) Special provision: -
IMDG:
EMS:F-A, S-A Limited Quantities: 0,5 kg
IATA:
Cargo: Maximum quantity: 100 Kg Packaging instructions: 676 Pass.
Maximum quantity: 25 Kg Packaging instructions: 669
Special provision: A3, A5
Maritime transport in bulk according to IMO instruments
Information not relevant

15- Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture
Seveso Category - Directive 2012/18/EU: E2
Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006
None
Regulation (EU) 2019/1148 - on the marketing and use of explosives precursors
Not applicable
Substances in Candidate List (Art. 59 REACH)
On the basis of available data, the product does not contain any SVHC in percentage ≥ than 0,1%.
Substances subject to authorisation (Annex XIV REACH)
None
Substances subject to exportation reporting pursuant to Regulation (EU) 649/2012:
None
Substances subject to the Rotterdam Convention:
None
Substances subject to the Stockholm Convention:

None

Healthcare controls

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected

Chemical safety assessment

A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3.

16- Other Information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Acute Tox. 3 Acute toxicity, category 3
Acute Tox. 4 Acute toxicity, category 4
STOT RE 2 Specific target organ toxicity - repeated exposure, category 2
Aquatic Chronic 1 Hazardous to the aquatic environment, chronic toxicity, category 1
Aquatic Chronic 2 Hazardous to the aquatic environment, chronic toxicity, category 2
H301 Toxic if swallowed.
H331 Toxic if inhaled.
H302+H332 Harmful if swallowed or if inhaled.
H373 May cause damage to organs through prolonged or repeated exposure.
H410 Very toxic to aquatic life with long lasting effects.
H411 Toxic to aquatic life with long lasting effects

LEGEND:

-ADR: European Agreement concerning the carriage of Dangerous goods by Road
-ATE: Acute Toxicity Estimate
-CAS: Chemical Abstract Service Number
-CE50: Effective concentration (required to induce a 50% effect)
-CE: Identifier in ESIS (European archive of existing substances)
-CLP: Regulation (EC) 1272/2008
-DNEL: Derived No Effect Level
-EmS: Emergency Schedule
-GHS: Globally Harmonized System of classification and labeling of chemicals
-IATA DGR: International Air Transport Association Dangerous Goods Regulation
-IC50: Immobilization Concentration 50%
-IMDG: International Maritime Code for dangerous goods
-IMO: International Maritime Organization
-INDEX: Identifier in Annex VI of CLP
-LC50: Lethal Concentration 50%
-LD50: Lethal dose 50%
-OEL: Occupational Exposure Level
-PBT: Persistent bioaccumulative and toxic as REACH Regulation
-PEC: Predicted environmental Concentration
-PEL: Predicted exposure level
-PNEC: Predicted no effect concentration
-REACH: Regulation (EC) 1907/2006
-RID: Regulation concerning the international transport of dangerous goods by train
-TLV: Threshold Limit Value
-TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
-TWA: Time-weighted average exposure limit
-TWA STEL: Short-term exposure limit

-VOC: Volatile organic Compounds
-vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German)

For In-Vitro use only.
The information in this MSDS is based on current and reliable sources but does not purport to be all inclusive and shall be used only as a guide.