

ENGLISH

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifiers

Product name: Bolton Broth

Product Number: 610216-620216

1.2 Identified uses of the relevant substance or mixture and uses advised against

Identified uses relevant: Professional uses, Health Services, scientific research and development

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier: Liofilchem®

Address: Via Scozia, 64026 - Roseto degli Abruzzi (TE)

Telephone number: 085/8930745

Fax number: 085/8930330

E-mail address: liofilchem@liofilchem.com

1.4 Emergency telephone number

+39 02-66101029 (Centro Antiveleni Niguarda Cà Granda - Milano).

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]

Skin Sens.1, Skin sensitization (Category 1); H317

Eye Irrit.2, Eye irritation (Category 2); H319

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008 [CLP]

Pictogram



Signal word

Warning

Hazard statement(s)

H317	May cause an allergic skin reaction
H319	Causes serious eye irritation

Precautionary statement(s)

P261	Avoid breathing fume
P264	Wash hands 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
P302 + P352	IF ON SKIN: Wash with plenty of soap and 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.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention
P337+P313	If eye irritation persists: Get medical advice/attention
P363	Wash contaminated clothing before reuse

Supplemental Hazard Statements - none

2.3 Other hazards - This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

3.2 Mixtures:

Hazardous substances

CAS n°	EC n°	Index n°	Registration number REACH	Concentration	Classification according Regulation (EC) No 1272/2008
Sodium carbonate					
497-19-8	-	011-005-00-2	01-2119485498-19-XXXX	2,1 %	Eye Irrit.2 H319

Sodium disulfite					
7681-57-4	-	016-063-00-2	01-2119531326-45-XXXX	1,8 %	Acute Tox.4 H302 Eye Dam.1 H318

Sodium pyruvate					
113-24-6	-	-	01-2120767047-50-XXXX	1,8 %	Skin. Sens.1B H317 Eye Irrit.2 H319

Additional Information:

For full text of H-statements, see SECTION 16

SECTION 4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician

In case of skin contact: Remove/Take off immediately all contaminated clothing. Wash with plenty of soap and water. Wash clothes completely before using them again. Consult a physician

In case of eye contact: After contact with eyes: rinse thoroughly with water. Consult an ophthalmologist. Remove contact lenses

If swallowed: Rinse mouth. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Consult a physician

4.2 Most important symptoms and effects, both acute and delayed

no data available

4.3 Indication of any immediate medical attention and special treatment needed

no data available

SECTION 5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

No data available.

5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Ensure adequate ventilation. Do not inhale.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided

6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For information on safe handling, see Chapter 7.

For information on personal protection equipment see Chapter 8.

For disposal information see Chapter 13.

SECTION 7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin. Provide appropriate exhaust ventilation at places where dust is formed. Do not inhale the mixture.

Do not eat, drink or smoke in work areas, wash hands after use; and remove contaminated clothing and protective equipment before entering areas where you eat.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

Recommended storage temperature, see the product label.

7.3 Specific end uses

Apart from the uses described in section 1.2 are not covered other specific uses.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

- **Sodium carbonate (CAS 497-19-8)**
Long-term worker DNEL – inhalation (local effects) – 10 mg/m³
- **Sodium bisulfite (CAS 7681-57-4)**
Long-term worker DNEL – inhalation (systemic effects)– 10 mg/m³
PNEC fresh water – 1 mg/l
PNEC sea water – 0,1 mg/l
PNEC sewage water – 75,4 mg/l

8.2 Exposure controls

Exposure controls

Handle in accordance with good hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eyes/Face Protection: It is advisable wear safety goggles

Skin protection: Handle with gloves

Body Protection: Use protective clothes in accordance with laboratory good practices.

Respiratory protection: It is advisable wear dust mask.

Environmental exposure control

For information relating to environmental precautions, see chapter 6.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance

Form Powder

Color Beige

Odour

No data available

pH

7.4 ± 0.2 - 27.6 g/l - 25 °C

Melting point/ freezing point

No data available

Initial boiling point and boiling range

No data available

Evaporation rate

No data available

Flammability (solid, gas)

No data available

Upper / lower flammability or explosive limits

No data available

Flash point

No data available

Auto-ignition temperature

No data available

Decomposition temperature

No data available

Vapour pressure

No data available

Vapour density

No data available

Relative density

No data available

Water solubility

Soluble

Partition coefficient: n-octanol/water

No data available

Viscosity

No data available

Explosive properties

Product is not explosive

Oxidizing properties

No data available

9.2 Other safety information

no data available

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

No data available

10.6 Hazardous decomposition products

No decomposition when used for the intended uses.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity:

- **Sodium carbonate (CAS 497-19-8)**
LD50 Oral - Rat - 2800 mg/kg
LD50 Dermal - Rabbit > 2000 mg/kg
- **Sodium bisulfite (CAS 7681-57-4)**
LD50 Oral - Rat - 1540 mg/kg
LC50 – Inhalation – Rat - >5,5 mg/l / 4l aerosol
LD50 Dermal - Rabbit > 2000 mg/kg

Skin corrosion/irritation: no data available

Serious eye damage/eye irritation:

- **Sodium carbonate (CAS 497-19-8)** Irritating to eyes
- **Sodium bisulfite (CAS 7681-57-4)** Causes serious eye damage

Respiratory or skin sensitization: no data available

Germ cell mutagenicity: negative

Carcinogenicity: no data available

Reproductive toxicity: no data available

Specific target organ toxicity - single exposure: no data available

Specific target organ toxicity - repeated exposure: no data available

Aspiration hazard: no data available

Additional information: RTECS: no data available

SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicity

- **Sodium carbonate (CAS 497-19-8)**
Toxicity to fish → static test LC50 - Lepomis macrochirus (Bluegill sunfish) - 300 mg/l - 96 h
Toxicity to daphnia and other aquatic invertebrates → semi-static test EC50 - Ceriodaphnia (water flea) - 220 - 227 mg/l - 48 h
- **Sodium bisulfite (CAS 7681-57-4)**
Toxicity to fish → static test LC50 - Leuciscus idus (Golden orfe) - > 215 - < 464 mg/l - 96 h
Toxicity to daphnia and other aquatic invertebrates → static test EC50 - Daphnia magna (Water flea) - 89 mg/l - 48 h
Toxicity to algae → static test ErC50 - Desmodesmus subspicatus (green algae) - 43,8 mg/l - 72 h
Toxicity to bacteria → static test EC50 - activated sludge - > 1.000 mg/l - 3 h
Toxicity to fish(Chronic toxicity) → flow-through test NOEC - Danio rerio (zebra fish) - >= 316 mg/l -

34 d
Toxicity to daphnia and other aquatic invertebrates(Chronic toxicity) → semi-static test NOEC - Daphnia magna (Water flea) - > 10 mg/l - 21 d

12.2 Persistence and degradability

no data available

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

This mixture contains no substances evaluated PBT or vPvB

12.6 Endocrine disrupting properties

The mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects

none

SECTION 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Not be disposed of with household waste. Do not discharge into sewers.

The product must be specially treated adhering to official regulations administrative. Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

SECTION 14. TRANSPORT INFORMATION

14.1 UN number

ADR/RID: - IMDG: - IATA: -

14.2 UN proper shipping name

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

14.3 Transport hazard class(es)

ADR/RID: - IMDG: - IATA: -

14.4 Packaging group

ADR/RID: - IMDG: - IATA: -

14.5 Environmental hazards

ADR/RID: no IMDG: no IATA: no

14.6 Special precautions for user

no data available

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

no data available

15. REGULATORY INFORMATION

This safety datasheet complies with:

- the requirements of European Parliament and of the Council Regulation (EC) No. 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) and Commission Regulation (EU) No. 453/2010 amending Commission Regulation (EC) No. 1907/2006.
- the requirements of Commission Regulation EU 2020/878

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

The product is classified, coded and labeled in accordance with EU Regulation on Hazardous Materials.

15.2 Chemical Safety Assessment

This product has not been made a chemical safety assessment.

16. OTHER INFORMATION**Text of H code(s) mentioned in Section 3**

Skin Sens. 1, Skin sensitization (Category 1)
Eye Irrit.2, Eye irritation (Category 2),
Acute Tox. 4 ; Acute Toxicity (Category 4)
Eye Dam.1, Eye Damage (Category 1).
H302 Harmful if swallowed
H317 May cause an allergic skin reaction
H318 Causes serious eye damage
H319 Causes serious eye irritation

Abbreviations and acronyms

- 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

Training advice

The product must be used by qualified personnel. It is recommended to provide basic training with regard to safety and health at work to ensure proper handling of the product.

Further information

The information in this document is based on the present state of our knowledge. The user must ensure the accuracy and completeness of such information in relation to the specific use intended.

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