SAFETY DATA SHEET (According to Regulation EC n° 1907/2006)

Revision: 3 / Revision Date: 01.06.2015

ENGLISH

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

1.1 Product identifiers

Product name: Muller Kauffmann Tetrathionate Novobiocin Broth (MKTTn) Product Number: 20072-26072

1.2 Identified uses of the relevant substance or mixture and uses advised against Identified uses relevant: Professional uses, Industrial uses scientific research and development

1.3 Details of the supplier of the safety data sheet Manufacturer/Supplier: Liofilchem[®]

Address: Via Scozia, zona industriale, 64026 - Roseto degli Abruzzi (TE) Telephone number: 085/8930745 Fax number: 085/8930330 E-mail address: liofilchem@liofilchem.net **1.4 Emergency telephone number** +39 02-66101029 (Centro Antiveleni Niguarda Cà Granda - Milano).

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP] Eye Dam. 1, Serious eye damage (Category 1); H318

2.2 Label elements

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

Pictogram



Signal word

Danger

Hazard statement(s)

H318

Causes severe eye injury.

Precautionary statement(s)

P280Wear protective gloves/protective clothing/eye protection/face protection.P305 + P351 + P338IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present
and easy to do. Continue rinsing.P310Immediately call a POISON CENTER or doctor/physician.

Supplemental Hazard Statements none

2.3 Other hazards - none

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	
Calcium carbonate						
471-34-1	207-439-9	-	-	3.9 %	Eye Dam. 1; Skin Irrit. 2; STOT SE 3; H315, H318, H335	
lodine						
7553-56-2	231-442-4	053-001-00-3	01-2119485285- 30-XXXX	0.4 %	Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2; STOT SE 3; STOT RE 1; Aquatic Acute 1; H312 + H332, H315, H319, H335, H372,H400	

Additional Information:

For the full text of H codes and R phrases mentioned in this section, see section 16

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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.

In case of skin contact: Wash off with soap and plenty of water. Consult a physician.

In case of eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

If swallowed: Never give anything by mouth to an unconscious person. Rinse mouth with water. If symptoms persist 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

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.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Ensure adequate ventilation.

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 Metodi e materiali per il contenimento e per la bonifica

Pick up and arrange disposal without creating dust. Sweep up and shovel. 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.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with eyes and skin. 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.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit value.

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.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties Appearance Form Liquid Color Pale green Odour **Odour Threshold** pН Melting point/ freezing point Initial boiling point and boiling range Flash point **Evaporation rate** Flammability (solid, gas) Upper / lower flammability or explosive limits Vapour pressure Vapour density **Relative density** Water solubility Partition coefficient: n-octanol/water Autoignition temperature **Decomposition temperature** Viscosity **Explosive properties Oxidizing properties**

No data available No data available 8.2 ± 0.2 at 25 °C No data available No data available No data available No data available not applicable No data available No data available No data available No data available soluble No data available No data available

9.2 Other safety information no data available

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.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity: lodine effects are: LD50 Oral - rat - 14.000 mg/kg LC50 Inal. - rat - 4 h - > 4,588 mg/l LC50 Dermal - rat - 1.425 mg/kg

Skin corrosion/irritation:

Calcium Carbonate effects are: Irritant to skin and mucous membranes. Iodine effects are: Skin - Low skin irritation

Serious eye damage/eye irritation:

Calcium Carbonate effects are: Strong irritant with the danger of severe eye injury. Iodine effects are: Eyes - Low eye irritation

Respiratory or skin sensitization: no data available

Germ cell mutagenicity: no data available

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Carcinogenicity: IARC: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen by IARC or expected.

Reproductive toxicity: no data available

Specific target organ toxicity - single exposure: Iodine effects are: Inhalation- May cause respiratory irritation

Specific target organ toxicity - repeated exposure: lodine effects are: Oral - May cause damage to organs through prolonged or repeated exposure - thyroid

Aspiration hazard: no data available

Additional information: RTECS: no data available

12. ECOLOGICAL INFORMATION

12.1 Toxicity

lodine effects are:

Toxicity to fish LC50 - Danio rerio (zebrafish) – 1.67 mg/l - 96.0 h Toxicity to daphnia and other aquatic invertebrates EC50 - Daphnia magna (Water flea) – 8.55 mg/l -48 h Toxicity to algae Growth inhibition EC50 - Desmodesmus subspicatus (green algae) - 0,13 mg – 72 h

12.2 Persistence and degradability

no data available

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil no data available

no data avallable

12.5 Results of PBT and vPvB assessment

This mixture contains no substances evaluated PBT or vPvB

12.6 Other adverse effects

no data available

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.

14. INFORMAZIONI SUL TRASPORTO				
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

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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.

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) and R-phrase(s) mentioned in Section 3

Acute Tox. 4 Acute toxicity (Category 4)

Skin Irrit. 2 Skin irritation (Category 2)

STOT SE 3 Specific target organ toxicity - single exposure (Category 3)

STOT RE 1 Specific target organ toxicity - repeated exposure, Oral (Category 1)

Aquatic Acute 1 Acute toxicity to the aquatic environment (Category 1)

H302+H312+H332 Harmful if swallowed, in contact with skin or if inhaled.

H315 Causes skin irritation.

H335 May cause respiratory irritation.

H372 Causes damage thyroid through prolonged or repeated exposure if swallowed

H400 Very toxic to aquatic life.

Abbreviations and acronyms

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

CLP: Regulation concerning the classification, labelling and packaging of substances and mixtures, Regulation (EC) No. 1272/2008.

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

IATA: International Air Transport Association

IMDG: International Maritime Code for Dangerous Goods

CL50: Middle lethal concentration of individuals in essay

DL50: The median lethal dose that causes death in 50% of individuals in essay

PBT: Persistent, bioaccumulative and toxic substance

REACH: Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), Regulation (EC) No. 1907/2006

RID: Regulations concerning the International Carriage of Dangerous Goods by Rail

vPvB: Very persistent and very bioaccumulative substance

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

This sheet replaces any previous edition.

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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