SECTION 1: Identification of the substance/mixture and of the company

1.1 Product identifier

1.2 Product Name: **Tetrathionate Broth Base**

1.3 Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/preparation: Laboratory chemical Laboratory and analytical use

Use advised against: no information available

1.4 Details of the supplier of the safety data sheet

- Name of Manufacturer: Arena BioScien, SEA
- Address of Manufacturer: Block 5, Street 9 Ismailia free zone. Ismailia- Egypt
- Telephone: +202 21813500/ +201113102057
- Email: admin@arenabioscientific.com

SECTION 2 Hazards identification

2.1 Classification of the substance or mixtureClassification (29 CFR 1910.1200)

- Classification (REGULATION (EC) No 1272/2008) [CLP/GHS]
  Not classified as hazardous for supply
- Classification (67/548/EEC, 1999/45/EC) (OSHA 29 CFR 1910.1200)
  Not classified as hazardous for supply

2.2 Label elements

- Signal Word: None
- Symbols: None
- Hazard phrases: None
- Precautionary Phrases:
  Keep container tightly closed.
  Do not breathe dust.
  Avoid contact with eyes, skin, or clothing.

SECTION 3 Composition/information on ingredients

3.1 Substances

INGREDIENT	g/l
Bile salts	1
Calcium carbonate	10
Peptone mixture	5
Sodium thiosulfate	30

3.2 Mixtures

4 **Component**	**CAS No**	**EC No**	**Weight %**	**CLP Classification - Regulation (EC) No 1272/2008**
Calcium carbonate	1317-65-3	EEC No. 215-279-6	21.75	-
Bile Salt Mixture	NA	-	2.2	STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319)

Full text of Hazard Statements: see section 16

SECTION 4 First aid measures

4.1 Description of first aid measures

- General

In case of doubt, or when symptoms persist, seek medical attention.

In general, this product is not hazardous to humans or animals, but like any other chemical, it should be treated with care, respect, and common sense.

- Contact with skin

Wash off with soap and plenty of water. Consult a physician.

If skin irritation or rash occurs: Get medical advice/attention. Contaminated clothing should be laundered before reuse.

SECTION 4 First aid measures (continued…)

- Contact with eyes

Rinse immediately with plenty of water for at least 15 minutes. Consult a physician.

- Ingestion
- Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
- Inhalation

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

4.2 Most important symptoms and effects, both acute and delayed

- Symptoms and effects are not known to date.

4.3 Indication of any immediate medical attention and special treatment needed

- None

SECTION 5 Fire-fighting measures

5.1 Extinguishing media

- In case of fire: Use suitable extinguishing measures that are appropriate to local circumstances and the surrounding environment

Suitable extinguishing media: Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam

Special hazards arising from the substance: Thermal decomposition can lead to release of irritating gases and vapors

5.2 Advice for firefighters

- In case of fire and/or explosion do not breathe fumes. Fight fire with normal precautions from a reasonable distance. Wear self-contained breathing apparatus.

SECTION 6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

6.2 Environmental Precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3 Methods and material for containment and cleaning up

Sweep up and shovel into suitable containers for disposal. Avoid dust formation. **Reference to other sections.** For disposal see Section 13.

6.4 Reference to other sections

- Hazardous combustion products: see section 5.
- Personal protective equipment: see section 8.
- Incompatible materials: see section 10.
- Disposal considerations: see section 13.

SECTION 7 Handling and storage

7.1 Precautions for safe handling

- Avoid contact with skin and eyes.
- Avoid inhalation of vapor or mist.
- Normal measures for preventive fire protection.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Recommended Storage Temperature: On receipt store between 10-30°C

Incompatible substances or mixtures: Observe hints for combined storage.

Consideration of other advice: Ventilation requirements (Use local and general ventilation. Specific designs for storage rooms or vessels recommended storage temperature: 15 – 25 °C Specific end use(s)).

SECTION 8 Exposure controls/personal protection

8.1 Exposure limits:

Component	The United kingdom	European union	Ireland
Calcium carbonate	STEL: 30 mg/m3 15 min STEL: 12 mg/m3 15 min TWA: 10 mg/m3 8 hr TWA: 4 mg/m3 8 hr		TWA: 10 mg/m3 8 hr. respirable dust TWA: 4 mg/m3 8 hr. STEL: 30 mg/m3 15 min STEL: 12 mg/m3 15 min

8.2 Control parameters

- Exposure above the recommended occupational exposure limit (OEL) may cause adverse health effects

8.3 Exposure controls

- Respiratory protection necessary at: Dust formation. Particulate filter device (EN 143). P1 (filters at least 80 % of airborne particles, colour code: White).
- Wear protective gloves. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and standard EN 374.
- Wear safety glasses approved to standard for ANSI Z87 or EN 166.
- Wear suitable protective clothing in accordance with good chemical hygiene practices.



Gloves | Safety Glasses | Lab Coat

SECTION 9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

- Appearance: Homogenous, free-flowing powder.
- Odor: Characteristic
- pH: 8.0 ± 0.2
- Melting point/Range: No information available
- Boiling Point/Range: Not applicable
- Flashpoint: No information available
- Evaporation Rate: Not applicable
- Flammability: this material is combustible, but will not ignite readily
- Vapor Pressure: No information available
- Vapor Density: No information available
- Specific Gravity: No information available
- Solubility in water: Completely soluble in water
- Partition Coefficient (n-Octanol/Water): No information available
- Autoignition Temperature: Product is not self-igniting
- Viscosity: Product is free flowing powder
- Explosive Properties: Product does not present an explosion hazard
- Oxidizing Properties: No information available

9.2 Other information

- No information available

SECTION 10 Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

No data available

10.3 Conditions to avoid
No data available
10.4 Incompatible materials
Strong oxidizing agents.
10.5 Hazardous combustion products: see section 5

SECTION 11 Toxicological information

11.1 Information on toxicological effects

- Acute toxicity: Product does not present an acute toxicity hazard based on known or supplied information
- Contact with skin: No data available
- Contact with eyes: No data available
- Ingestion: No data available
- Inhalation: No data available
- Carcinogenicity: No evidence of carcinogenic effects.
- Mutagenicity: No evidence of mutagenic effects.
- Teratogenicity: No information available

SECTION 12 Ecological information

12.1 Toxicity
- No data available

12.2 Persistence and degradability
- Readily Biodegradable

12.3 Bioaccumulation Potential
- No information available

12.4 Mobility in soil
- Water soluble and may spread to soil

12.5 Results of PBT and vPvB assessment
No data available

12.6 Other Adverse Effects
- To the best of our knowledge, the properties of this material have not been fully evaluated.
- On available data, substance is not harmful to the environment.

SECTION 13 Disposal considerations

13.1 Waste treatment methods
Contact a licensed professional waste disposal service to dispose off this material.
Disposal considerations Classification (REACH)
- Waste Codes in accordance with the European Waste catalogue (EWC) are origin-defined.

Since this product is used in several industries, no Waste Code can be provided by the supplier. The Waste Code should be determined in arrangement with your waste disposal partner or the responsible authority.

SECTION 14 Transport information

14.1 UN Number
- Not classified as hazardous for transport

14.2 UN Proper Shipping Name
- Not applicable

14.3 Transport hazard class(es)
- Not applicable

14.4 Packing group
- Not applicable

14.5 Environmental hazards
- Not Classified

14.6 Special precautions for user
- Not Classified

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code
- Not Classified

14.8 Domestic Surface Transport (US DOT)
- Proper Shipping Name: Not applicable
- DOT UN No.: Not applicable

- DOT Hazard Class: Not applicable
- DOT Packing Group: Not applicable

14.9 International Road/Rail (ADR/RID)
- Proper Shipping Name: Not applicable
- ADR UN No.: Not applicable
- ADR Hazard Class: Not applicable
- ADR Packing Group: Not applicable
- Tunnel Code: Not applicable

14.10 Ocean/Sea (IMO/IMDG)
- Proper Shipping Name: Not applicable
- IMDG UN No.: Not applicable
- IMDG Hazard Class: Not applicable
- IMDG Packing Group: Not applicable

14.11 Air (ICAO/IATA)
- Proper Shipping Name: Not applicable
- ICAO Un No.: Not applicable
- ICAO Hazard Class: Not applicable
- ICAO Packing Group: Not applicable

SECTION 15 Regulatory information

International Inventories

Europe (EINECS/ELINCS/NLP), China (IECSC), Taiwan (TCSI), Korea (KECL), Japan (ENCS), Japan (ISHL), Canada (DSL/NDSL), Australia
(AICS), New Zealand (NZIoC), Philippines (PICCS). US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

Component	CAS No	EINECS	ELINCS	NLP	IECSC	TCSI	KECL	ENCS	ISHL
Calcium carbonate	1317-65-3	215-279-6	-	-	X	X	KE-21996	X	X
Bile Salt Mixture	NA	-	-	-	-	-	-	-	-

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	DSL	NDSL	AICS	NZIoC	PICCS
Calcium carbonate	1317-65-3	X	ACTIVE	-	X	X	X	X
Bile Salt Mixture	NA	-	-	-	-	-	-	-

Legend: X - Listed '-' - Not Listed **KECL** - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

Authorisation/Restrictions according to EU REACH

Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements
Calcium carbonate	1317-65-3	Not applicable	Not applicable
Bile Salt Mixture	NA	Not applicable	Not applicable

Regulation (EC) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of dangerous chemicals Not applicable

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

National Regulations

UK - Take note of Control of Substances Hazardous to Health Regulations (COSHH) 2002 and 2005 Amendment

WGK Classification Water endangering class = non-hazardous to waters (self classification)

Component	Germany - Water Classification (VwVwS)	Germany - TA-Luft Class
Calcium carbonate	nwg	

Safety, health and environmental regulations/legislation specific for the substance or mixture
(This Safety Data Sheet is provided in compliance with the EC Directive 1907/2006 - 453/2010, WHMIS 2015 requirements as specified in the Hazardous Products Act (HPA) and the HazardousProducts Regulations (HPR), and with the OSHA Hazard Communication Standard 29 CFR 1910.1200.

- Regulation (EC) No. 1272/2008 on the classification, labelling and packaging of substances and mixtures (CLP Regulation) applies in Europe.

SECTION 16 Other information

H302: harmful if swallowed
H315: causes skin irritation
H319: causes serious eye irritation
H335: May cause respiratory irritation
Date of Preparation: January 2024
Revision: Rev. 0
Replaces: New issue
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Safety Data Sheet