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

1.1 Product identifier

- Product Name: **Hektoen Enteric agar**

1.2 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: Do not use for products which come into contact with foodstuffs. Do not use for private purposes (household).

1.3 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: Warning
- 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 Mixtures

Component	CAS No	EC No	Weight %	CLP Classification - Regulation (EC) No 1272/2008
Sucrose	57-50-1	EEC No. 200-334-9	14.05	-
Sodium cholate	361-09-1	EEC No. 206-643-5	11.4	Aquatic Chronic 3 (H412)
Sodium deoxycholate	302-95-4	EEC No. 206-132-7	3.7	Acute Tox. 4 (H302) Aquatic Chronic 3 (H412)
Ferric ammonium citrate	1185-57-5	EEC No. 214-686-6	1.85	-

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.

- 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: co-ordinate firefighting measures to the fire surroundings water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special hazards arising from the substance or mixture

5.2 Carbon oxides, Sodium oxides, Hydrogen chloride gas, Nitrogen oxides (NOx)

5.3 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

Soak up with inert adsorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal. **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 vapour 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. Control parameters

Exposure limits

List source(s): **UK** - EH40/2005 Work Exposure Limits, Third edition. Published 2018. **IRE -** 2018 Code of Practice for the Chemical
Agents Regulations, Schedule 1. Published by the Health and Safety Authority

Component	The United Kingdom	European Union	Ireland
Sucrose	STEL: 20 mg/m^3 15 min TWA: 10 mg/m^3 8 hr		TWA: 10 mg/m^3 8 hr. STEL: 20 mg/m^3 15 min
Ferric ammonium citrate	STEL: 2 mg/m^3 15 min TWA: 1 mg/m^3 8 hr		

Biological limit values

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

Derived No Effect Level (DNEL) / Derived Minimum Effect Level (DMEL) See table for values

Component	Acute effects local (Dermal)	Acute effects systemic (Dermal)	Chronic effects local (Dermal)	Chronic effects systemic (Dermal)
Ferric ammonium citrate 1185-57-5 (1.85)				DNEL = 2.78mg/kg bw/day

Component	Acute effects local (Inhalation)	Acute effects systemic (Inhalation)	Chronic effects local (Inhalation)	Chronic effects systemic (Inhalation)
Ferric ammonium citrate 1185-57-5 (1.85)				DNEL = 9.8mg/m^3

Predicted No Effect Concentration (PNEC)

See values below.

Component	Fresh water	Fresh water sediment	Water Intermittent	Microorganisms in sewage treatment	Soil (Agriculture)
Ferric ammonium citrate 1185-57-5 (1.85)	PNEC = 0.1mg/L	PNEC = 0.481mg/kg sediment dw	PNEC = 1mg/L	PNEC = 59.1mg/L	PNEC = 37.5µg/kg soil dw

Component	Marine water	Marine water sediment	Marine water intermittent	Food chain	Air
Ferric ammonium citrate 1185-57-5 (1.85)	PNEC = 10µg/L	PNEC = 48.1µg/kg sediment dw	PNEC = 0.1mg/L		

8.2. Exposure controls

Engineering Measures

None under normal use conditions.

Personal protective equipment

Eye Protection ety glasses with side (European standard

Hand Protection Protectiv 166)

Glove material	Breakthrough time	Glove thickness	EU standard	Glove comments
Disposable gloves	See manufacturers recommendations	-	EN 374	(minimum requirement)

Skin and body protection Long sleeved clothing.

Inspect gloves before use.
Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves.
(Refer to manufacturer/supplier for information)
Ensure gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.
Remove gloves with care avoiding skin contamination.

Respiratory Protection No protective equipment is needed under normal use conditions.

Large scale/emergency use Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced
Recommended Filter type: Particle filter

Small scale/Laboratory use Maintain adequate ventilation

- **Environmental exposure controls** No special environmental precautions required. Avoid dust formation
- Wear suitable protective clothing in accordance with good chemical hygiene practices.

SECTION 9 Physical and chemical properties

9.1 Information on basic physical and chemical properties
- Appearance: Homogenous, free-flowing.
- Odor: Characteristic
- pH: 7.5 ± 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):

Component	**log Pow**
Sucrose	-3.67

- 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
No data available

10.5 Hazardous combustion products: see section 5

SECTION 11 Toxicological information

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

Product Information Product does not present an acute toxicity hazard based on known or supplied information

(a) acute toxicity;

Oral Based on available data, the classification criteria are not met
Dermal No data available
Inhalation No data available

Toxicology data for the components

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sucrose	LD50 = 29700 mg/kg (Rat)	-	-
Sodium deoxycholate	LD50 = 1370 mg/kg (Rat)	-	-

(b) skin corrosion/irritation; No data available

(c) serious eye damage/irritation; No data available

(d) respiratory or skin sensitization;

Respiratory No data available
Skin No data available No information available

(e) germ cell mutagenicity; No data available

None known

(f) carcinogenicity; No data available

There are no known carcinogenic chemicals in this product

(g) reproductive toxicity; No data available
Reproductive Effects None known.
Developmental Effects None known.
Neurological Effects None known.

(h) STOT-single exposure; No data available

(i) STOT-repeated exposure; No data available

Target Organs None known.

(j) aspiration hazard; Not applicable
Solid

Symptoms / effects,both acute and delayed No information available.

11.2. Information on other hazards

Endocrine Disrupting Properties Assess endocrine disrupting properties for human health. This product does not contain any known or suspected endocrine disruptors.

SECTION 12 Ecological information

12.1. Toxicity

Ecotoxicity effects .

12.2. Persistence and degradability Expected to be biodegradable **12.3. Bioaccumulative potential**
Bioaccumulation is unlikely

Component	log Pow	Bioconcentration factor (BCF)
Sucrose	-3.67	No data available

12.4. Mobility in soil The product is water soluble, and may spread systems
No data available for assessment.

12.5. Results of PBT and vPvB assessment

12.6. Endocrine disrupting properties
Endocrine Disruptor Information None known

12.7. Other adverse effects
None known
Persistent Organic Pollutant This product does not contain any known or suspected substance
Ozone Depletion Potential This product does not contain any known or suspected substance

SECTION 13 Disposal considerations

13.1 Waste treatment methods
Offer surplus and non- recyclable solutions to a licenced company. Contact a licenced 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

15.1 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 Hazardous Products 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

Full text of H-Statements referred to under sections 2 and 3

H302 - Harmful if swallowed
H412 - Harmful to aquatic life with long lasting effects

CAS - Chemical Abstracts Service

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

PICCS - Philippines Inventory of Chemicals and Chemical Substances

ENCS - Japanese Existing and New Chemical Substances

IECSC - Chinese Inventory of Existing Chemical Substances

AICS - Australian Inventory of Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

NZIoC - New Zealand Inventory of Chemicals

WEL - Workplace Exposure Limit

TWA - Time Weighted Average

ACGIH - American Conference of Governmental Industrial Hygienists

IARC - International Agency for Research on Cancer

DNEL - Derived No Effect Level

Predicted No Effect Concentration (PNEC)

RPE - Respiratory Protective Equipment

LD50 - Lethal Dose 50%

LC50 - Lethal Concentration 50%

EC50 - Effective Concentration 50%

NOEC - No Observed Effect Concentration

POW - Partition coefficient Octanol:Water

PBT - Persistent, Bioaccumulative, Toxic

vPvB - very Persistent, very Bioaccumulative

ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road

ICAO/IATA - International Civil Aviation Organization/International Air Transport Association

IMO/IMDG - International Maritime Organization/International Maritime Dangerous Goods Code

MARPOL - International Convention for the Prevention of Pollution from Ships

OECD - Organisation for Economic Co-operation and Development

ATE - Acute Toxicity Estimate

BCF - Bioconcentration factor

VOC - (Volatile Organic Compound)

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This document is believed to be correct, but does not purport to be all inclusive and shall be used only as a guide. Arena BioScien Manufacturers, SEA. shall not be held liable for any damage resulting from handling or from contact with the above product. These suggestions should not be confused with state, municipal or insurance requirements, and constitute NO WARRANTY

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Safety Data Sheet