MATERIAL SAFETY DATA SHEET

FRASER Listeria Selective Enrichment Broth Base

Date of Issue: 08/27/2023

Material Safety Data sheet

Section 1: Product and Company Information

Product Name	FRASER Listeria Selective Enrichment Broth Base		
Catalogue Number	i23274	Technical Phone	0098 21 66787291 09391003565
E-mail	ibresco@gmail.com	Fax No	0098 2633523460
Company Address	Zist Kavosh Iranian, No.432, East Kokab Av,45 Metri Golshahr, Karaj, Iran.		

Section 2: Hazards Identification

Classification of the substance or mixture

Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.

Label elements

Pictogram	none
Signal word	none
Hazard statement(s) none	none
Precautionary statement(s)	none
Supplemental Hazard Statements	none

Other hazards

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

Section 3: Composition / Information on Ingredients

Mixture

Component		Classification	Concentration
Lithium chloride			
CAS-No. EC-No. Registration number	7447-41-8 231-212-3 01-2119560574-35-XXXX	Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2; H302, H315, H319	>= 1 - < 10 %

Section 4: First Aid Measures

Description of first-aid measures

If inhaled	After inhalation: fresh air.
In case of skin contact	In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.
In case of eye contact	After eye contact: rinse out with plenty of water. Remove contact lenses.
If swallowed	After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.

Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

Indication of any immediate medical attention and special treatment needed
No data available

Section 5: Fire Fighting Measures

Extinguishing media

Suitable extinguishing media
Water Foam Carbon dioxide (CO2) Dry powder.

Unsuitable extinguishing media
For this substance/mixture no limitations of extinguishing agents are given.

Special hazards arising from the substance or mixture
Mixture with combustible ingredients.
Fire may cause evolution of:
Hydrogen chloride gas, Oxides of phosphorus
Development of hazardous combustion gases or vapors possible in the event of fire.

Advice for firefighters
In the event of fire, wear self-contained breathing apparatus.

Further information
Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

Section 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures
Advice for non-emergency personnel: Avoid inhalation of dusts. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.

Environmental precautions
Do not let product enter drains.

Methods and materials for containment and cleaning up
Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

Reference to other sections
For disposal see section 13.

Section 7: Handling and Storage

Precautions for safe handling
For precautions see section 2.

Conditions for safe storage, including any incompatibilities

Storage conditions	Tightly closed. Dry. Recommended storage temperature see product label.

Section 8: Exposure Controls / Personal Protection

Control parameters
Ingredients with workplace control parameters

Exposure controls
Personal protective equipment
Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses.

Skin protection

Full contact
Material: Nitrile rubber
Minimum layer thickness: 0,11 mm
Break through time: > 480 min
Material tested:KCL 741 Dermatril® L
Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0,11 mm
Break through time: > 480 min
Material tested:KCL 741 Dermatril® L

Respiratory protection

required when dusts are generated.
Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.
Recommended Filter type: Filter type P2
The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

Control of environmental exposure

Do not let product enter drains.

Section 9: Physical and Chemical Properties

Physical state	solid
Color	beige
Odor	peptone-like
Odor Threshold	No data available
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
Vapor pressure	No data available
Vapor density	No data available
Autoignition temperature	No data available
Decomposition temperature	No data available
pH	7,0 - 7,4 at 57,4 g/l at 25 °C
Viscosity	No data available
Water solubility	57,4 g/l
Partition coefficient: n-octanol/water	No data available
Relative density	No data available
Explosive properties	No data available

Oxidizing properties	No data available
Other safety information	No data available

Section 10: Stability and Reactivity

Reactivity
The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

Chemical stability
The product is chemically stable under standard ambient conditions (room temperature).

Possibility of hazardous reactions
no information available

Conditions to avoid
no information available

Incompatible materials
no information available

Hazardous decomposition products
In the event of fire: see section 5

Section 11: Toxicological Information

Information on toxicological effects

Mixture

Acute toxicity	Acute toxicity estimate Oral - > 2.000 mg/kg (Calculation method) Inhalation: No data available Dermal: No data available
Skin corrosion/irritation	No data available
Serious eye damage/eye irritation	No data available
Respiratory or skin sensitization	No data available
Germ cell mutagenicity	No data available
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	Hazardous properties cannot be excluded but are unlikely when the product is handled appropriately.

Components

Lithium Chloride

Acute toxicity	LD50 Oral - Rat - male - 526 mg/kg Remarks: (ECHA) LC50 Inhalation - Rat - male and female - 4 h - > 5,57 mg/l (OECD Test Guideline 403) LD50 Dermal - Rat - male and female - > 2.000 mg/kg (OECD Test Guideline 402)

Skin corrosion/irritation	Skin - Rabbit Result: Severe skin irritation - 24 h Remarks: (RTECS)
Serious eye damage/eye irritation	Eyes - Rabbit Result: Eye irritation (OECD Test Guideline 405)
Respiratory or skin sensitization	Buehler Test - Guinea pig Result: Not a skin sensitizer. (OECD Test Guideline 406)
Germ cell mutagenicity	Test Type: Ames test Test system: Escherichia coli/Salmonella typhimurium Result: negative Remarks: (in analogy to similar products) The value is given in analogy to the following substances: Lithium hydroxide Test Type: In vitro mammalian cell gene mutation test Test system: mouse lymphoma cells Result: negative Remarks: (in analogy to similar products) The value is given in analogy to the following substances: Lithium hydroxide monohydrate
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	No data available

Section 12: Ecological Information

Toxicity	
Mixture	No data available
Persistence and degradability	No data available
Bio accumulative potential	No data available
Mobility in soil	No data available
Results of PBT and vPvB assessment	This substance/mixture contains no components considered to be either persistent, bio accumulative and toxic (PBT), or very persistent and very bio accumulative (vPvB) at levels of 0.1% or higher.
Other adverse effects	Discharge into the environment must be avoided.
Components	
	Lithium chloride
Toxicity to fish	static test LC50 - Oncorhynchus mykiss (rainbow trout) – 158 mg/l - 96 h (OECD Test Guideline 203)

Toxicity to daphnia and other aquatic invertebrates	static test EC50 - Daphnia magna (Water flea) – 249 mg/l – 48 h (OECD Test Guideline 202)
Toxicity to algae	static test ErC50 - Desmodesmus subspicatus (green algae) - > 400 mg/l - 72 h (OECD Test Guideline 201) static test EC50 - activated sludge - 320,05 mg/l - 3 h (OECD Test Guideline 209)
Toxicity to bacteria	Remarks: (in analogy to similar products) The value is given in analogy to the following substances: Lithium hydroxide

Section 13: Disposal Consideration

Waste treatment methods
Product
See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

Section 14: Transport Information

UN number	ADR/RID: - IMDG: - IATA: -
UN proper shipping name	ADR/RID: Not dangerous goods IMDG: Not dangerous goods IATA: Not dangerous goods
Transport hazard class(es)	ADR/RID: - IMDG: - IATA: -
Packaging group	ADR/RID: - IMDG: - IATA: -
Environmental hazards	ADR/RID: no IMDG Marine pollutant: no IATA: no
Special precautions for user	
Further information	Not classified as dangerous in the meaning of transport regulations.

Section 15: Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture
This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

Chemical Safety Assessment
For this product a chemical safety assessment was not carried out.

Section 16: Other Information

DISCLAIMER

For R&D use only. Not for drug, household or other uses.

WARRANTY

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. *ibresco* shall not be held liable for any damage resulting from handling or from contact with the above product.

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