

Fraser Half Broth (Base) ISO 11133, ISO 11290-1, for microbiology

article number: **HP18** Version: **3.0 en** Replaces version of: 2020-11-20 Version: (2) date of compilation: 2020-11-19 Revision: 2021-12-22

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

1.1 Product identifier

Article number

Identification of the substance

Fraser Half Broth (Base) ISO 11133, ISO 11290-1, for microbiology

HP18

Registration number (REACH)

not relevant (mixture)

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

Relevant identified uses:

Uses advised against:

Laboratory chemical Laboratory and analytical use

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

Carl Roth GmbH + Co KG Schoemperlenstr. 3-5 D-76185 Karlsruhe Germany

Telephone:+49 (0) 721 - 56 06 0 **Telefax:** +49 (0) 721 - 56 06 149 **e-mail:** sicherheit@carlroth.de **Website:** www.carlroth.de

Competent person responsible for the safety data :Department Health, Safety and Environment sheet:

e-mail (competent person):

sicherheit@carlroth.de

1.4 Emergency telephone number

Name	Street	Postal code/city	Telephone	Website
National Poisons Information Centre Beaumont Hospital	Beaumont Road	Dublin 9	01 809 2166	https:// www.poisons.ie/

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 (CLP)

This mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/ EC.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP)

not required



Fraser Half Broth (Base) ISO 11133, ISO 11290-1, for microbiology

article number: HP18

2.3 Other hazards

Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

SECTION 3: Composition/information on ingredients

3.1 Substances

not relevant (mixture)

3.2 Mixtures

Description of the mixture

Name of sub stance	-	Ident	tifier	Wt%		ation acc. to GHS	Pictogram	s Notes				
Lithium chlorid	e	7447- EC	41-8 Skin Irrit. 2 / H315 Eye Irrit. 2 / H319 No		7-41-8 Skin Irrit. 2 / H		Skin Irrit. 2 / H315		Skin Irrit. 2 / H315		(!)	
Name of sub- stance	Ide	entifier	Spo	ecific Conc. L	imits	M-Factors	ATE	Exposure route				
Lithium chloride		AS No 47-41-8		-		-	526 ^{mg} / _{kg}	oral				
		EC No 1-212-3										

For full text of abbreviations: see SECTION 16

SECTION 4: First aid measures

4.1 Description of first aid measures



General notes

Take off contaminated clothing.

Following inhalation

Provide fresh air. In all cases of doubt, or when symptoms persist, seek medical advice.

Following skin contact

Rinse skin with water/shower. In all cases of doubt, or when symptoms persist, seek medical advice.

Following eye contact

Rinse cautiously with water for several minutes. In all cases of doubt, or when symptoms persist, seek medical advice.

Following ingestion

Rinse mouth. Call a doctor if you feel unwell.

Most important symptoms and effects, both acute and delayed

Irritant effects

4.2



Fraser Half Broth (Base) ISO 11133, ISO 11290-1, for microbiology

article number: HP18

4.3 Indication of any immediate medical attention and special treatment needed none

SECTION 5: Firefighting measures

5.1 Extinguishing media



Suitable extinguishing media

co-ordinate firefighting measures to the fire surroundings water, foam, dry extinguishing powder, ABC-powder

Unsuitable extinguishing media

water jet

5.2 Special hazards arising from the substance or mixture

Combustible.

Hazardous combustion products

In case of fire may be liberated: Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO₂), Hydrogen chloride (HCl), May produce toxic fumes of carbon monoxide if burning.

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



For non-emergency personnel

No special measures are necessary.

6.2 Environmental precautions

Keep away from drains, surface and ground water.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains. Take up mechanically.

Advice on how to clean up a spill

Take up mechanically.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

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.



Fraser Half Broth (Base) ISO 11133, ISO 11290-1, for microbiology

article number: HP18

SECTION 7: Handling and storage

- 7.1 Precautions for safe handling
 No special measures are necessary.
 Advice on general occupational hygiene
 Keep away from food, drink and animal feedingstuffs.
- **7.2 Conditions for safe storage, including any incompatibilities** Store in a dry place.

Incompatible substances or mixtures

Observe hints for combined storage.

Consideration of other advice:

Specific designs for storage rooms or vessels

Recommended storage temperature: 15 - 25 °C

7.3 Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

National limit values

Occupational exposure limit values (Workplace Exposure Limits)

This information is not available.

Relevant DNELs	of compone	ents of th	e mixture			
Name of sub- stance	CAS No	End- point	Threshol d level	Protection goal, route of exposure	Used in	Exposure time
Lithium chloride	7447-41-8	DNEL	10 mg/m ³	human, inhalat- ory	worker (industry)	chronic - systemic effects
Lithium chloride	7447-41-8	DNEL	30 mg/m ³	human, inhalat- ory	worker (industry)	acute - systemic effects
Lithium chloride	7447-41-8	DNEL	73,2 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
Lithium chloride	7447-41-8	DNEL	100 mg/kg bw/day	human, dermal	worker (industry)	acute - systemic effects

Relevant PNECs of components of the mixture

Name of sub- stance	CAS No	End- point	Threshol d level	Organism	Environmental compartment	Exposure time
Lithium chloride	7447-41-8	PNEC	10,4 ^{mg} / _l	aquatic organ- isms	freshwater	short-term (single instance)
Lithium chloride	7447-41-8	PNEC	1,04 ^{mg} / _l	aquatic organ- isms	marine water	short-term (single instance)
Lithium chloride	7447-41-8	PNEC	140,2 ^{mg} / _l	aquatic organ- isms	sewage treatment plant (STP)	short-term (single instance)



article number: HP18

Relevant PNECs of components of the mixture						
Name of sub- stance	CAS No	End- point	Threshol d level	Organism	Environmental compartment	Exposure time
Lithium chloride	7447-41-8	PNEC	270 ^{mg} / _{kg}	aquatic organ- isms	freshwater sedi- ment	short-term (single instance)
Lithium chloride	7447-41-8	PNEC	27 ^{mg} / _{kg}	aquatic organ- isms	marine sediment	short-term (single instance)
Lithium chloride	7447-41-8	PNEC	49,95 ^{mg} / _{kg}	terrestrial organ- isms	soil	short-term (single instance)

8.2 Exposure controls

Individual protection measures (personal protective equipment)

Eye/face protection



Use safety goggle with side protection.

Skin protection



hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374.

• type of material

NBR (Nitrile rubber)

material thickness

>0,11 mm

• breakthrough times of the glove material

>480 minutes (permeation: level 6)

• other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended.

Respiratory protection



Respiratory protection necessary at: Dust formation. Particulate filter device (EN 143). P1 (filters at least 80 % of airborne particles, colour code: White).

Environmental exposure controls

Keep away from drains, surface and ground water.



Fraser Half Broth (Base) ISO 11133, ISO 11290-1, for microbiology

article number: HP18

SEC	TION 9: Physical and chemical proper	ties
9.1	Information on basic physical and chemical pro	perties
	Physical state	solid
	Form	-
	Colour	beige
	Odour	characteristic
	Melting point/freezing point	not determined
	Boiling point or initial boiling point and boiling range	not determined
	Flammability	this material is combustible, but will not ignite readily
	Lower and upper explosion limit	not determined
	Flash point	not applicable
	Auto-ignition temperature	not determined
	Decomposition temperature	not relevant
	pH (value)	~7,2
	Kinematic viscosity	not relevant
	Solubility(ies)	
	Water solubility	not determined
	Partition coefficient	
	Partition coefficient n-octanol/water (log value):	this information is not available
	Vapour pressure	not determined
	Density and/or relative density	
	Density	not determined
	Relative vapour density	information on this property is not available
	Particle characteristics	No data available.
	Other safety parameters	
	Oxidising properties	none
9.2	Other information	
	Information with regard to physical hazard classes:	hazard classes acc. to GHS (physical hazards): not relevant
	Other safety characteristics:	There is no additional information.



article number: HP18

SECTION 10: Stability and reactivity

10.1 Reactivity

The product in the delivered form is not dust explosion capable; the enrichment of fine dust however leads to the danger of dust explosion.

10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

10.3 Possibility of hazardous reactions

Violent reaction with: strong oxidiser

10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

10.5 Incompatible materials

There is no additional information.

10.6 Hazardous decomposition products

Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

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

Test data are not available for the complete mixture.

Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Classification according to GHS (1272/2008/EC, CLP)

This mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/ EC.

Acute toxicity

Shall not be classified as acutely toxic.

Name of substance	CAS No	Exposure route	ATE
Lithium chloride	7447-41-8	oral	526 ^{mg} / _{kc}

Acute toxicity of components of the mixture

Name of substance	CAS No	Exposure route	Endpoint	Value	Species
Lithium chloride	7447-41-8	oral	LD50	526 ^{mg} / _{kg}	rat

Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation

Shall not be classified as seriously damaging to the eye or eye irritant.



Fraser Half Broth (Base) ISO 11133, ISO 11290-1, for microbiology

article number: HP18

Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

Symptoms related to the physical, chemical and toxicological characteristics

• If swallowed

Data are not available.

• If in eyes

slightly irritant but not relevant for classification

• If inhaled

Inhalation of dust may cause irritation of the respiratory system

• If on skin

Data are not available.

• Other information

none

11.2 Endocrine disrupting properties

None of the ingredients are listed.

11.3 Information on other hazards

There is no additional information.

SECTION 12: Ecological information

12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment.



article number: **HP18**

Aquatic toxicity (acute) of components of the mixture						
Name of sub- stance	CAS No	Endpoint	Value	Species	Exposure time	
Lithium chloride	7447-41-8	LC50	158 ^{mg} / _l	fish	96 h	
Lithium chloride	7447-41-8	EC50	249 ^{mg} / _l	aquatic invertebrates	48 h	
Lithium chloride	7447-41-8	ErC50	>400 ^{mg} / _l	algae	72 h	

Aquatic toxicity (chronic) of components of the mixture

Name of sub- stance	CAS No	Endpoint	Value	Species	Exposure time
Lithium chloride	7447-41-8	EC50	>1,7 ^{mg} / _l	aquatic invertebrates	21 d

Biodegradation

Data are not available.

- **12.2 Process of degradability** Data are not available.
- **12.3 Bioaccumulative potential** Data are not available.
- **12.4 Mobility in soil** Data are not available.
- **12.5 Results of PBT and vPvB assessment** Data are not available.
- **12.6 Endocrine disrupting properties** None of the ingredients are listed.

12.7 Other adverse effects

Data are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods



Consult the appropriate local waste disposal expert about waste disposal.

Sewage disposal-relevant information

Do not empty into drains.

13.2 Relevant provisions relating to waste

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process. Waste catalogue ordinance (Germany).



Fraser Half Broth (Base) ISO 11133, ISO 11290-1, for microbiology

article number: **HP18**

13.3 Remarks

Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities. Please consider the relevant national or regional provisions.

SECTION 14: Transport information

14.1 UN number or ID number

- 14.2 UN proper shipping name
- 14.3 Transport hazard class(es)
- 14.4 Packing group
- 14.5 Environmental hazards

not subject to transport regulations not assigned none not assigned non-environmentally hazardous acc. to the dangerous goods regulations

14.6 Special precautions for user

There is no additional information.

14.7 Maritime transport in bulk according to IMO instruments The cargo is not intended to be carried in bulk.

14.8 Information for each of the UN Model Regulations

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN) - Additional information

Not subject to ADR, RID and ADN.

International Maritime Dangerous Goods Code (IMDG) - Additional information Not subject to IMDG.

International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information Not subject to ICAO-IATA.

SECTION 15: Regulatory information

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

Relevant provisions of the European Union (EU)

Restrictions according to REACH, Annex XVII

Dangerous substances with restrictions (REACH, Annex XVII)					
Name of substance	Name acc. to inventory	CAS No	Restriction	No	
Lithium chloride	substances in tattoo inks and perman- ent make-up		R75	75	

Legend

R75
1. Shall not be placed on the market in mixtures for use for tattooing purposes, and mixtures containing any such substances shall not be used for tattooing purposes, after 4 January 2022 if the substance or substances in question is or are present in the following circumstances:

(a) in the case of a substance classified in Part 3 of Annex VI to Regulation (EC) No 1272/2008 as carcinogen category 1A, 1B or 2, or germ cell mutagen category 1A, 1B or 2, the substance is present in the mixture in a concentration equal to or greater than 0,0005 % by weight;
(b) in the case of a substance classified in Part 3 of Annex VI to Regulation (EC) No 1272/2008 as reproductive toxicant category 1A, 1B or 2, the substance is present in the mixture in a concentration equal to or greater than 0,001% by weight;
(c) in the case of a substance classified in Part 3 of Annex VI to Regulation (EC) No 1272/2008 as skin sensitiser category 1, 1A or 1B, the substance is present in the mixture in a concentration equal to or greater than 0,001 % by weight;

(d) in the case of a substance classified in Part 3 of Annex VI to Regulation (EC) No 1272/2008 as skin corrosive cat-



article number: **HP18**

Legend	
egory 1, 1A, 1B or 1C or skin irritant category 2, or as serious eye damage category 1 or eye irritant category 2, the	
substance is present in the mixture in a concentration equal to or greater than:	
(i) 0,1 % by weight, if the substance is used solely as a pH regulator;	
(ii) 0,01 % by weight, in all other cases;	_
(e) in the case of a substance listed in Annex II to Regulation (EC) No 1223/2009 (*1), the substance is present in the	5
mixture in a concentration equal to or greater than 0,00005 % by weight;	
(f) in the case of a substance for which a condition of one or more of the following kinds is specified in column g	
(Product type, Body parts) of the table in Annex IV to Regulation (EC) No 1223/2009, the substance is present in the	;
mixture in a concentration equal to or greater than 0,00005 % by weight:	
(i) "Rinse-off products";	
(ii) "Not to be used in products applied on mucous membranes";	
(iii) "Not to be used in eye products";	_
(g) in the case of a substance for which a condition is specified in column h (Maximum concentration in ready for u	
preparation) or column i (Other) of the table in Annex IV to Regulation (EC) No 1223/2009, the substance is present	
the mixture in a concentration, or in some other way, that does not accord with the condition specified in that colu	mn;
(h) in the case of a substance listed in Appendix 13 to this Annex, the substance is present in the mixture in a conce	su-
tration equal to or greater than the concentration limit specified for that substance in that Appendix.	•
2. For the purposes of this entry use of a mixture "for tattooing purposes" means injection or introduction of the m	IX-
ture into a person's skin, mucous membrane or eyeball, by any process or procedure (including procedures com-	
monly referred to as permanent make-up, cosmetic tattooing, micro-blading and micro-pigmentation), with the air	n of
making a mark or design on his or her body.	
3. If a substance not listed in Appendix 13 falls within more than one of points (a) to (g) of paragraph 1, the strictes	
concentration limit laid down in the points in question shall apply to that substance. If a substance listed in Append	אונ
13 also falls within one or more of points (a) to (g) of paragraph 1, the concentration limit laid down in point (h) of	
paragraph 1 shall apply to that substance.	
4. By way of derogation, paragraph 1 shall not apply to the following substances until 4 January 2023:	
(a) Pigment Blue 15:3 (CI 74160, EC No 205-685-1, CAS No 147-14-8);	
(b) Pigment Green 7 (CI 74260, EC No 215-524-7, CAS No 1328-53-6).	
5. If Part 3 of Annex VI to Regulation (EC) No 1272/2008 is amended after 4 January 2021 to classify or re-classify a	
stance such that the substance then becomes caught by point (a), (b), (c) or (d) of paragraph 1 of this entry, or such	
that it then falls within a different one of those points from the one within which it fell previously, and the date of a	
plication of that new or revised classification is after the date referred to in paragraph 1 or, as the case may be, pa	ra-
graph 4 of this entry, that amendment shall, for the purposes of applying this entry to that substance, be treated a	S
taking effect on the date of application of that new or revised classification.	
6. If Annex II or Annex IV to Regulation (EC) No 1223/2009 is amended after 4 January 2021 to list or change the list	ting
of a substance such that the substance then becomes caught by point (e), (f) or (g) of paragraph 1 of this entry, or	
such that it then falls within a different one of those points from the one within which it fell previously, and the	
amendment takes effect after the date referred to in paragraph 1 or, as the case may be, paragraph 4 of this entry	,
that amendment shall, for the purposes of applying this entry to that substance, be treated as taking effect from th	าย
date falling 18 months after entry into force of the act by which that amendment was made.	
Suppliers placing a mixture on the market for use for tattooing purposes shall ensure that, after 4 January 2022,	the
mixture is marked with the following information:	
(a) the statement "Mixture for use in tattoos or permanent make-up";	
(b) a reference number to uniquely identify the batch;	
(c) the list of ingredients in accordance with the nomenclature established in the glossary of common ingredient	
names pursuant to Article 33 of Regulation (EC) No 1223/2009, or in the absence of a common ingredient name, th	e
IUPAC name. In the absence of a common ingredient name or IUPAC name, the CAS and EC number. Ingredients s	hall
be listed in descending order by weight or volume of the ingredients at the time of formulation. "Ingredient" mean	IS
any substance added during the process of formulation and present in the mixture for use for tattooing purposes.	Im-
purities shall not be regarded as ingredients. If the name of a substance, used as ingredient within the meaning of	î .
this entry, is already required to be stated on the label in accordance with Regulation (EC) No 1272/2008, that ingre	edi-
ent does not need to be marked in accordance with this Regulation:	
(d) the additional statement "pH regulator" for substances falling under point (d)(i) of paragraph 1;	
(e) the statement "Contains nickel. Čan cause allergic reactions." if the mixture contains nickel below the concentra	1-
tion limit specified in Appendix 13;	
(f) the statement "Contains chromium (VI). Can cause allergic reactions." if the mixture contains chromium (VI) belo	w
the concentration limit specified in Appendix 13;	
(g) safety instructions for use insofar as they are not already required to be stated on the label by Regulation (EC) N	٧o
	-
The information shall be clearly visible, easily legible and marked in a way that is indelible.	
The information shall be written in the official language(s) of the Member State(s) where the mixture is placed on t	he
market, unless the Member State(s) concerned provide(s) otherwise.	
Where necessary because of the size of the package, the information listed in the first subparagraph, except for po	oint
(a), shall be included instead in the instructions for use.	
Before using a mixture for tattooing purposes, the person using the mixture shall provide the person undergoing	the
Before using a mixture for tattooing purposes, the person using the mixture shall provide the person undergoing procedure with the information marked on the package or included in the instructions for use pursuant to this par	a-
graph.	
8. Mixtures that do not contain the statement "Mixture for use in tattoos or permanent make-up" shall not be used	for
tattooing purposes.	
9. This entry does not apply to substances that are gases at temperature of 20 °C and pressure of 101,3 kPa, or ger	ner-
ate a vapour pressure of more than 300 kPa at temperature of 50 °C, with the exception of formaldehyde (CAS No	50-
00-0, EC No 200-001-8).	
10. This entry does not apply to the placing on the market of a mixture for use for tattooing purposes, or to the use	e of
a mixture for tattooing purposes, when placed on the market exclusively as a medical device or an accessory to a	
medical device, within the meaning of Regulation (EU) 2017/745, or when used exclusively as a medical device or a	n
accessory to a medical device, within the same meaning. Where the placing on the market or use may not be exclu	 IS-
ively as a medical device or an accessory to a medical device, the requirements of Regulation (EU) 2017/745 and of	this
Regulation shall apply cumulatively.	



article number: **HP18**

List of substances subject to authorisation (REACH, Annex XIV)/SVHC - candidate list

None of the ingredients are listed.

Seveso Directive

2012/18/EU (Seveso III)			
Νο	Do Dangerous substance/hazard categories Qualifying quantity (tonnes) for the application of lower and upper-tier requirements		Notes
	not assigned		

Deco-Paint Directive

VOC content	0 %
-------------	-----

Industrial Emissions Directive (IED)

VOC content	0 %
-------------	-----

Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)

none of the ingredients are listed

Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

none of the ingredients are listed

Water Framework Directive (WFD)

List of pollutants (WFD)				
Name of substance	Name acc. to inventory	CAS No	Listed in	Remarks
Lithium chloride	Substances and preparations, or the breakdown products of such, which have been proved to pos- sess carcinogenic or mutagenic properties or properties which may affect steroidogenic, thyroid, reproduction or other endocrine- related functions in or via the aquatic environment		A)	
Lithium chloride	Metals and their compounds		A)	

Legend

A) Indicative list of the main pollutants

Regulation on the marketing and use of explosives precursors

none of the ingredients are listed

Regulation on drug precursors

none of the ingredients are listed

Regulation on substances that deplete the ozone layer (ODS)

none of the ingredients are listed

Regulation concerning the export and import of hazardous chemicals (PIC)

none of the ingredients are listed



article number: HP18

Regulation on persistent organic pollutants (POP)

none of the ingredients are listed

Other information

Directive 94/33/EC on the protection of young people at work. Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

National inventories

Country	Inventory	Status
AU	AICS	not all ingredients are listed
CA	DSL	not all ingredients are listed
CN	IECSC	not all ingredients are listed
EU	ECSI	not all ingredients are listed
EU	REACH Reg.	not all ingredients are listed
JP	CSCL-ENCS	not all ingredients are listed
JP	ISHA-ENCS	not all ingredients are listed
KR	KECI	not all ingredients are listed
MX	INSQ	not all ingredients are listed
NZ	NZIoC	not all ingredients are listed
PH	PICCS	not all ingredients are listed
TR	CICR	not all ingredients are listed
TW	TCSI	all ingredients are listed
US	TSCA	not all ingredients are listed

Legend

AICS	Australian Inventory of Chemical Substances
CICR	Chemical Inventory and Control Regulation
CSCL-ENCS	List of Existing and New Chemical Substances (CSCL-ENCS)
DSL	Domestic Substances List (DSL)
ECSI	EC Substance Inventory (EÌNEĆS, ELINCS, NLP)
IECSC	Inventory of Existing Chemical Substances Produced or Imported in China
INSQ	National Inventory of Chemical Substances
ISHA-ENCS	Inventory of Existing and New Chemical Substances (ISHA-ENCS)
KECI	Korea Existing Chemicals Inventory
NZIoC	New Zealand Inventory of Chemicals
PICCS	Philippine Inventory of Chemicals and Chemical Substances (PICCS)
REACH Reg.	REAĊH registered substances
TCSI	Taiwan Chemical Substance Inventory
TSCA	Toxic Substance Control Act

15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.



Fraser Half Broth (Base) ISO 11133, ISO 11290-1, for microbiology

article number: **HP18**

SECTION 16: Other information

Indication of changes (revised safety data sheet)

Alignment to regulation: Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU

Restructuring: section 9, section 14

Section	Former entry (text/value)	Actual entry (text/value)	Safety- relev- ant
2.2	Signal word: not required		yes
2.3	Other hazards: Other hazards There is no additional information.		yes
2.3		Results of PBT and vPvB assessment: This mixture does not contain any substances that are assessed to be a PBT or a vPvB.	yes

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations	
Acute Tox.	Acute toxicity	
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de naviga- tion intérieures (European Agreement concerning the International Carriage of Dangerous Goods by In- land Waterways)	
ADR	Accord relatif au transport international des marchandises dangereuses par route (Agreement concern- ing the International Carriage of Dangerous Goods by Road)	
ATE	Acute Toxicity Estimate	
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)	
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures	
DGR	Dangerous Goods Regulations (see IATA/DGR)	
DNEL	Derived No-Effect Level	
EC50	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval	
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identi- fier of substances commercially available within the EU (European Union)	
EINECS	European Inventory of Existing Commercial Chemical Substances	
ELINCS	European List of Notified Chemical Substances	
ErC50	≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control	
Eye Dam.	Seriously damaging to the eye	
Eye Irrit.	Irritant to the eye	
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Na- tions	
IATA	International Air Transport Association	
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)	



Fraser Half Broth (Base) ISO 11133, ISO 11290-1, for microbiology

article number: **HP18**

Abbr.	Descriptions of used abbreviations	
ICAO	International Civil Aviation Organization	
IMDG	International Maritime Dangerous Goods Code	
index No	The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008	
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval	
LD50 Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality specified time interval		
NLP	No-Longer Polymer	
PBT	Persistent, Bioaccumulative and Toxic	
PNEC	Predicted No-Effect Concentration	
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals	
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regula- tions concerning the International carriage of Dangerous goods by Rail)	
Skin Corr.	Corrosive to skin	
Skin Irrit.	Irritant to skin	
SVHC	Substance of Very High Concern	
VOC	Volatile Organic Compounds	
vPvB	Very Persistent and very Bioaccumulative	

Key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU.

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

Classification procedure

Physical and chemical properties. The classification is based on tested mixture. Health hazards. Environmental hazards. The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

List of relevant phrases (code and full text as stated in section 2 and 3)

Code	Text
H302	Harmful if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.