SAFETY DATA SHEET
(in accordance with Regulation (EU) 2020/878)

100100-FENNEL BITTER ESSENTIAL OIL

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

1.1 Product identifier.

Product Name:	FENNEL BITTER ESSENTIAL OIL
Product Code:	100100
Chemical Name:	Fennel oil, bitter
CAS No:	8006-84-6
EC No:	283-414-6
Registration No:	01-2120118959-42-

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

Industrial use.

Uses advised against:
Uses other than those recommended.

1.3 Details of the supplier of the safety data sheet.

Company:	**ESENCIAS MARTÍNEZ LOZANO, S.A.**
Address:	Carretera de Lorca, Km. 7
City:	30400 - Caravaca de la Cruz
Province:	Murcia (Spain)
Telephone:	+34 968725386
E-mail:	comercial@esenciaslozano.com
Web:	www.esenciaslozano.com

1.4 Emergency telephone number: +34 968725386 (Only available during office hours; Monday-Friday; 09:00-19:00)

SECTION 2: HAZARDS IDENTIFICATION.

2.1 Classification of the substance or mixture.
In accordance with Regulation (EC) No 1272/2008:
Aquatic Acute 1 : Very toxic to aquatic life.
Aquatic Chronic 2 : Toxic to aquatic life with long lasting effects.
Asp. Tox. 1 : May be fatal if swallowed and enters airways.
Skin Irrit. 2 : Causes skin irritation.
Skin Sens. 1 : May cause an allergic skin reaction.

2.2 Label elements.
Labelling in accordance with Regulation (EC) No 1272/2008:
Pictograms:



Signal Word:
Danger
Hazard statements:

H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.

-Continued on next page.-

Precautionary statements:

P261	Avoid breathing vapours.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/…
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P321	Specific treatment (see on MSDS).
P331	Do NOT induce vomiting.
P501	Dispose of contents/container to …

2.3 Other hazards.

The substance is not PBT
The substance is not vPvB
Substance does not have endocrine disrupting properties.

In normal use conditions and in its original form, the product itself does not involve any other risk for health and the environment.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS.

3.1 Substances.
UVCB (Substance of Unknown or Variable composition, Complex reaction products or Biological materials).

Identifiers	Name	Concentrate	(*)Classification - Regulation (EC) No 1272/2008	
			Classification	Specifics concentration limits and Acute toxicity estimate
CAS No: 8006-84-6 EC No: 283-414-6	Fennel oil, bitter		Aquatic Acute 1, H400 - Aquatic Chronic 1, H410 - Asp. Tox. 1, H304 - Carc. 2, H351 - Muta. 2, H341 - Skin Irrit. 2, H315 - Skin Sens. 1, H317	-

Composition:

Identifiers	Name	Concentrate	(*)Classification - Regulation (EC) No 1272/2008	
			Classification	Specifics concentration limits and Acute toxicity estimate
Index No: 601-096-00-2 CAS No: 5989-27-5 EC No: 227-813-5	limonene (CAS:138-86-3 EINECS:205-341-0)	25 - 50 %	Aquatic Acute 1, H400 (M=1) - Aquatic Chronic 3, H412 - Asp. Tox. 1, H304 - Flam. Liq. 3, H226 - Skin Irrit. 2, H315 - Skin Sens. 1B, H317	-
CAS No: 4180-23-8 EC No: 224-052-0	trans-Anethole [(E)-Anethole]	25 - 50 %	Aquatic Chronic 3, H412 - Skin Sens. 1, H317	-

-Continued on next page.-

CAS No: 80-56-8 EC No: 201-291-9	alpha-Pinene	2.5 - 10 %	Acute Tox. 4, H302 - Aquatic Acute 1, H400 - Aquatic Chronic 1, H410 - Asp. Tox. 1, H304 - Flam. Liq. 3, H226 - Skin Irrit. 2, H315 - Skin Sens. 1, H317	-
CAS No: 99-83-2 EC No: 202-792-5	alpha-Phellandrene	1 - 10 %	Asp. Tox. 1, H304 - Flam. Liq. 3, H226	-
CAS No: 140-67-0 EC No: 205-427-8	ESTRAGOLE (4-allylanisole)	1 - 10 %	Acute Tox. 4, H302 - Aquatic Chronic 3, H412 - Eye Irrit. 2, H319 - Skin Irrit. 2, H315 - Skin Sens. 1, H317	-
CAS No: 123-35-3 EC No: 204-622-5	7-methyl-3-methyleneocta-1,6-diene	1 - 10 %	Asp. Tox. 1, H304 - Flam. Liq. 3, H226 - Skin Irrit. 2, H315	-
CAS No: 127-91-3 EC No: 204-872-5	Pin-2(10)-ene	1 - 10 %	Asp. Tox. 1, H304 - Flam. Liq. 3, H226 - Skin Irrit. 2, H315 - Skin Sens. 1, H317	-
Index No: 601-094-00-1 CAS No: 99-87-6 EC No: 202-796-7	1-isopropyl4-methylbenzene, p-cymene	1 - 2.5 %	Acute Tox. 3, H331 - Aquatic Chronic 2, H411 - Asp. Tox. 1, H304 - Flam. Liq. 3, H226	Inhalation: ETA = 3 mg/l (ATP 17)
CAS No: 76-22-2 EC No: 200-945-0	Camphor	0 - 1 %	Acute Tox. 4, H332 - Eye Dam. 1, H318 - Flam. Sol. 2, H228 - STOT SE 2, H371 - Skin Irrit. 2, H315	-
CAS No: 586-62-9 EC No: 209-578-0	Terpinolene	0.25 - 1 %	Aquatic Acute 1, H400 - Aquatic Chronic 1, H410 - Asp. Tox. 1, H304 - Skin Sens. 1, H317	-
Index No: 601-095-00-7 CAS No: 99-86-5 EC No: 202-795-1	p-mentha-1,3-diene, 1-isopropyl4-methylcyclohexa-1,3-diene, alpha-terpinene	0.1 - 1 %	Acute Tox. 4, H302 - Aquatic Chronic 2, H411 - Asp. Tox. 1, H304 - Flam. Liq. 3, H226 - Skin Sens. 1, H317	Oral: ETA = 1680 mg/kg pc (ATP 17)

-Continued on next page.-

Index No: 603-235-00-2 CAS No: 78-70-6 EC No: 201-134-4	Linalool, 3,7-dimethyl- 1,6-octadien-3-ol, dl-linalool	0.1 - 1 %	Skin Sens. 1B, H317	-

(*) *The complete text of the H phrases is given in section 16 of this Safety Data Sheet.*
[2] Substance with a national workplace exposure limit (see section 8.1).

3.2 Mixtures.
Not applicable.

SECTION 4: FIRST AID MEASURES.

IRRITANT MIXTURE. Its repeated or prolonged contact with the skin or mucous membranes can cause irritant symptoms such as reddening of the skin, blisters, or dermatitis. Some of the symptoms may not be immediate. They can cause allergic reactions on the skin.

4.1 Description of first aid measures.
In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious.

Inhalation.
Take the victim into open air; keep them warm and calm. If breathing is irregular or stops, perform artificial respiration. Do not administer anything orally. If unconscious, place them in a suitable position and seek medical assistance.

Eye contact.
Remove contact lenses, if present and if it is easy to do. Wash eyes with plenty of clean and cool water for at least 10 minutes while pulling eyelids up, and seek medical assistance.

Skin contact.
Remove contaminated clothing. Wash skin vigorously with water and soap or a suitable skin cleaner. NEVER use solvents or thinners.

Ingestion.
If accidentally ingested, seek immediate medical attention. Keep calm. NEVER induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed.
Irritant Product, repeated or prolonged contact with skin or mucous membranes can cause redness, blisters or dermatitis, inhalation of spray mist or particles in suspension may cause irritation of the respiratory tract, some symptoms may not be immediate.
Repeated or prolonged eye contact may cause stinging, tearing, redness, swelling, and blurred vision.
Harmful Product, prolonged exposure due to inhalation may cause anaesthetic effects and the need for immediate medical assistance.
It may cause an allergic reaction, dermatitis, redness or inflammation of the skin.

4.3 Indication of any immediate medical attention and special treatment needed.
In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious. Do not induce vomiting. If the person vomits, clear the respiratory tract.

SECTION 5: FIREFIGHTING MEASURES.

The product does not present any particular risk in case of fire.

5.1 Extinguishing media.
Suitable extinguishing media:
Extinguisher powder or CO2. In case of more serious fires, also alcohol-resistant foam and water spray.

Unsuitable extinguishing media:
Do not use a direct stream of water to extinguish. In the presence of electrical voltage, you cannot use water or foam as extinguishing media.

5.2 Special hazards arising from the substance or mixture.
Special risks.
Exposure to combustion or decomposition products can be harmful to your health.

-Continued on next page.-

During a fire and depending on its magnitude the following may occur:
- Carbon monoxide, carbon dioxide.

5.3 Advice for firefighters.
Use water to cool tanks, cisterns, or containers close to the heat source or fire. Take wind direction into account. Prevent the products used to fight the fire from going into drains, sewers, or waterways. Product residues and extinguishing media may contaminate the aquatic environment.

Fire protection equipment.
According to the size of the fire, it may be necessary to use protective suits against the heat, individual breathing equipment, gloves, protective goggles or facemasks, and boots.

SECTION 6: ACCIDENTAL RELEASE MEASURES.

6.1 Personal precautions, protective equipment and emergency procedures.
For exposure control and individual protection measures, see section 8.

6.2 Environmental precautions.
Product dangerous for the environment, in case of large spills or if the product contaminates lakes, rivers, or sewers, inform the responsible authorities according to local legislation. Prevent the contamination of drains, surface or subterranean waters, and the ground.

6.3 Methods and material for containment and cleaning up.
Contain and collect spillage with inert absorbent material (earth, sand, vermiculite, Kieselguhr...) and clean the area immediately with a suitable decontaminant.
Deposit waste in closed and suitable containers for disposal, in compliance with local and national regulations (see section 13).

6.4 Reference to other sections.
For exposure control and individual protection measures, see section 8.
For later elimination of waste, follow the recommendations under section 13.

SECTION 7: HANDLING AND STORAGE.

7.1 Precautions for safe handling.
For personal protection, see section 8.
In the application area, smoking, eating, and drinking must be prohibited.
Follow legislation on occupational health and safety.
Never use pressure to empty the containers. They are not pressure-resistant containers. Keep the product in containers made of a material identical to the original.

7.2 Conditions for safe storage, including any incompatibilities.
Store according to local legislation. Observe indications on the label. Store the containers between 5 and 25 º C, in a dry and well-ventilated place, far from sources of heat and direct solar light. Keep far away from ignition points. Keep away from oxidising agents and from highly acidic or alkaline materials. Do not smoke. Prevent the entry of non-authorised persons. Once the containers are open, they must be carefully closed and placed vertically to prevent spills.

The product is not affected by Directive 2012/18/EU (SEVESO III).

7.3 Specific end use(s).
Not available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION.

8.1 Control parameters.

-Continued on next page.-

The product does NOT contain substances with Professional Exposure Environmental Limit Values.The product does NOT contain substances with Biological Limit Values.
Concentration levels DNEL/DMEL:

Name	DNEL/DMEL	Type	Value
alpha-Pinene CAS No: 80-56-8 EC No: 201-291-9	DNEL (Workers)	Inhalation, Chronic, Systemic effects	5,98 (mg/m³)
7-methyl-3-methyleneocta-1,6-diene CAS No: 123-35-3 EC No: 204-622-5	DNEL (Workers)	Inhalation, Chronic, Systemic effects	5,83 (mg/m³)
Pin-2(10)-ene CAS No: 127-91-3 EC No: 204-872-5	DNEL (Workers)	Inhalation, Chronic, Systemic effects	5,98 (mg/m³)

DNEL: Derived No Effect Level, level of exposure to the substance below which adverse effects are not anticipated.
DMEL: Derived Minimal Effect Level, exposure level corresponding to a low risk, that risk should be considered a tolerable minimum.

8.2 Exposure controls.

Measures of a technical nature:
Provide adequate ventilation, which can be achieved by using good local exhaust-ventilation and a good general exhaust system.

Concentration:	**100 %**				
Uses:	**Industrial use.**				
Breathing protection:					
PPE:	Filter mask for protection against gases and particles.				
Characteristics:	«CE» marking, category III. The mask must have a wide field of vision and an anatomically designed form in order to be sealed and watertight.				
CEN standards:	EN 136, EN 140, EN 405				
Maintenance:	Should not be stored in places exposed to high temperatures and damp environments before use. Special attention should be paid to the state of the inhalation and exhalation valves in the face adaptor.				
Observations:	Read carefully the manufacturer's instructions regarding the equipment's use and maintenance. Attach the necessary filters to the equipment according to the specific nature of the risk (Particles and aerosols: P1-P2-P3, Gases and vapours: A-B-E-K-AX), changing them as advised by the manufacturer.				
Filter Type needed:	A2				
Hand protection:					
PPE:	Protective gloves against chemicals.				
Characteristics:	«CE» marking, category III.				
CEN standards:	EN 374-1, En 374-2, EN 374-3, EN 420				
Maintenance:	Keep in a dry place, away from any sources of heat, and avoid exposure to sunlight as much as possible. Do not make any changes to the gloves that may alter their resistance, or apply paints, solvents or adhesives.				
Observations:	Gloves should be of the appropriate size and fit the user's hand well, not being too loose or too tight. Always use with clean, dry hands.				
Material:	PVC (polyvinyl chloride)	Breakthrough time (min.):	> 480	Material thickness (mm):	0,35
Eye protection:					
PPE:	Protective goggles with built-in frame.				
Characteristics:	«CE» marking, category II. Eye protector with built-in frame for protection against dust, smoke, fog and vapour.				
CEN standards:	EN 165, EN 166, EN 167, EN 168				
Maintenance:	Visibility through lenses should be ideal. Therefore, these parts should be cleaned daily. Protectors should be disinfected periodically following the manufacturer's instructions.				
Observations:	Some signs of wear and tear include: yellow colouring of the lenses, superficial scratching of the lenses, scraping etc.				
Skin protection:					

-Continued on next page.-

PPE:	Protective clothing.
Characteristics:	«CE» marking, category II. Protective clothing should not be too tight or loose in order not to obstruct the user's movements.
CEN standards:	EN 340
Maintenance:	In order to guarantee uniform protection, follow the washing and maintenance instructions provided by the manufacturer.
Observations:	The protective clothing should offer a level of comfort in line with the level of protection provided in terms of the hazard against which it protects, bearing in mind environmental conditions, the user's level of activity and the expected time of use.
PPE:	Work footwear.
Characteristics:	«CE» marking, category II.
CEN standards:	EN ISO 13287, EN 20347
Maintenance:	This product adapts to the first user's foot shape. That is why, as well as for hygienic reasons, it should not be used by other people.
Observations:	Work footwear for professional use includes protection elements aimed at protecting users against any injury resulting from an accident

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES.

9.1 Information on basic physical and chemical properties.
Physical state: Liquid
Colour: Not applicable/Not available due to the nature/properties of the product
Odour: Not applicable/Not available due to the nature/properties of the product
Odour threshold: Not applicable/Not available due to the nature/properties of the product
Melting point: Not applicable/Not available due to the nature/properties of the product
Freezing point: Not applicable/Not available due to the nature/properties of the product
Boiling point or initial boiling point and boiling range: 185 ºC (Estimation based on the indication of the Regulation (CE) Nº1272/2008.)
Flammability: Not applicable/Not available due to the nature/properties of the product
Lower explosion limit: Not applicable/Not available due to the nature/properties of the product
Upper explosion limit: Not applicable/Not available due to the nature/properties of the product
Flash point: <65 ºC
Auto-ignition temperature: Not applicable/Not available due to the nature/properties of the product
Decomposition temperature: Not applicable/Not available due to the nature/properties of the product
pH: Not applicable/Not available due to the nature/properties of the product
Kinematic viscosity: Not applicable/Not available due to the nature/properties of the product
Solubility: Not applicable/Not available due to the nature/properties of the product
Hydrosolubility: Not applicable/Not available due to the nature/properties of the product
Liposolubility: Not applicable/Not available due to the nature/properties of the product
Partition coefficient n-octanol/water (log value): Not applicable/Not available due to the nature/properties of the product
Vapour pressure: 1,451 (Estimation based on the indication of the Regulation (CE) Nº1272/2008.)
Absolute density: Not applicable/Not available due to the nature/properties of the product
Relative density: 0.877 - 0.920
Relative vapour density: Not applicable/Not available due to the nature/properties of the product
Particle characteristics: Not applicable/Not available due to the nature/properties of the product

9.2 Other information
Not applicable/Not available due to the nature/properties of the product

SECTION 10: STABILITY AND REACTIVITY.

10.1 Reactivity.
The product does not present hazards by their reactivity.

10.2 Chemical stability.
Stable under the recommended handling and storage conditions (see section 7).

10.3 Possibility of hazardous reactions.
The product does not present possibility of hazardous reactions.

10.4 Conditions to avoid.

-Continued on next page.-

Avoid any improper handling.

10.5 Incompatible materials.
Keep away from oxidising agents and from highly alkaline or acidic materials in order to prevent exothermic reactions.

10.6 Hazardous decomposition products.
No decomposition if used for the intended uses.

SECTION 11: TOXICOLOGICAL INFORMATION.

IRRITANT MIXTURE. Its repeated or prolonged contact with the skin or mucous membranes can cause irritant symptoms such as reddening of the skin, blisters, or dermatitis. Some of the symptoms may not be immediate. They can cause allergic reactions on the skin.

11.1 Information on hazard classes as defined in Regulation (EC) Nº 1272/2008.
There are no tested data available on the product.
Repeated or prolonged contact with the product can cause the elimination of oil from the skin, giving rise to non-allergic contact dermatitis and absorption of the product through the skin.

a) acute toxicity;
Not conclusive data for classification.

Acute Toxicity Estimate (ATE):
Substances:
ATE (Oral) = 3.571 mg/kg

b) skin corrosion/irritation;
Product classified:
Skin irritant, Category 2: Causes skin irritation.

c) serious eye damage/irritation;
Not conclusive data for classification.

d) respiratory or skin sensitisation;
Product classified:
Skin sensitiser, Category 1: May cause an allergic skin reaction.

e) germ cell mutagenicity;
Based on available data, the classification criteria are not met.

f) carcinogenicity;
Based on available data, the classification criteria are not met.

g) reproductive toxicity;
Not conclusive data for classification.

h) STOT-single exposure;
Not conclusive data for classification.

i) STOT-repeated exposure;
Not conclusive data for classification.

j) aspiration hazard;
Product classified:
Aspiration toxicity, Category 1: May be fatal if swallowed and enters airways.

11.2 Information on other hazards.
Endocrine disrupting properties
This product does not contain components with endocrine-disrupting properties with effects on human health.
Other information
There is no information available on other adverse health effects.

-Continued on next page.-

SECTION 12: ECOLOGICAL INFORMATION.

12.1 Toxicity.
No information is available regarding the ecotoxicity.

12.2 Persistence and degradability.
No information is available regarding the biodegradability
No information is available on the degradability
No information is available about persistence and degradability of the product.

12.3 Bioaccumulative potential.
Information about the bioaccumulation.

Name	Bioaccumulation			
	Log Pow	BCF	NOECs	Level
alpha-Pinene CAS No: 80-56-8 EC No: 201-291-9	4,48	-	-	High
Pin-2(10)-ene CAS No: 127-91-3 EC No: 204-872-5	4,16	-	-	High
Camphor CAS No: 76-22-2 EC No: 200-945-0	2,34	-	-	Low

12.4 Mobility in soil.
No information is available about the mobility in soil.
The product must not be allowed to go into sewers or waterways.
Prevent penetration into the ground.

12.5 Results of PBT and vPvB assessment.
No information is available about the results of PBT and vPvB assessment of the product.

12.6 Endocrine disrupting properties.
This product doesn't contain components with environmental endocrine disrupting properties.

12.7 Other adverse effects.
The product is not affected by the Regulation (EU) 2024/590 of the European Parliament and of the Council of 7 February 2024 on substances that deplete the ozone layer.
No information is available about other adverse effects for the environment.

SECTION 13: DISPOSAL CONSIDERATIONS.

13.1 Waste treatment methods.
Do not dump into sewers or waterways. Waste and empty containers must be handled and eliminated according to current, local/national legislation.
Follow the provisions of Directive 2008/98/EC regarding waste management.

SECTION 14: TRANSPORT INFORMATION.

Transport following ADR rules for road transport, RID rules for railway, ADN for inner waterways, IMDG for sea, and ICAO/IATA for air transport.
Land: Transport by road: ADR, Transport by rail: RID.
Transport documentation: Consignment note and written instructions

-Continued on next page.-

Sea: Transport by ship: IMDG.
Transport documentation: Bill of lading
Air: Transport by plane: ICAO/IATA.
Transport document: Airway bill.

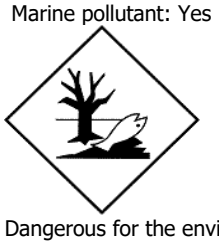
14.1 UN number or ID number.
UN No: UN3082

14.2 UN proper shipping name.
Description:
ADR/RID: UN 3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS LIMONENE (CAS:138-86-3 EINECS:205-341-0) / TRANS-ANETHOLE [(E)-ANETHOLE]), 9, PG III, (-)
IMDG: UN 3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS LIMONENE (CAS:138-86-3 EINECS:205-341-0) / TRANS-ANETHOLE [(E)-ANETHOLE]), 9, PG III, MARINE POLLUTANT
ICAO/IATA: UN 3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS LIMONENE (CAS:138-86-3 EINECS:205-341-0) / TRANS-ANETHOLE [(E)-ANETHOLE]), 9, PG III

14.3 Transport hazard class(es).
Class(es): 9

14.4 Packing group.
Packing group: III

14.5 Environmental hazards.
Marine pollutant: Yes



Dangerous for the environment
Transport by ship, FEm – Emergency sheets (F – Fire, S - Spills): F-A,S-F

14.6 Special precautions for user.
Labels: 9



Hazard number: 90
Provisions concerning carriage in bulk ADR: Not authorized carriage in bulk in accordance with ADR.
Proceed in accordance with point 6.
ADR LQ: 5 L
IMDG LQ: 5 L
ICAO LQ: 30 kg B

14.7 Maritime transport in bulk according to IMO instruments.
The product is not transported in bulk.

SECTION 15: REGULATORY INFORMATION.

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

-Continued on next page.-

The product is not affected by Regulation (EU) No 528/2012 concerning the making available on the market and use of biocidal products.
The product is not affected by the procedure established Regulation (EU) No 649/2012, concerning the export and import of dangerous chemicals.

15.2 Chemical safety assessment.
No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16: OTHER INFORMATION.

Complete text of the H phrases that appear in section 3:

H226	Flammable liquid and vapour.
H228	Flammable solid.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H341	Suspected of causing genetic defects.
H351	Suspected of causing cancer.
H371	May cause damage to organs.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Classification codes:

Acute Tox. 3: Acute toxicity (Inhalation), Category 3
Acute Tox. 4: Acute toxicity (Inhalation), Category 4
Acute Tox. 4: Acute toxicity (Oral), Category 4
Aquatic Acute 1: Acute toxicity to the aquatic environment, Category 1
Aquatic Chronic 1: Chronic effect to the aquatic environment, Category 1
Aquatic Chronic 2: Chronic effect to the aquatic environment, Category 2
Aquatic Chronic 3: Chronic effect to the aquatic environment, Category 3
Asp. Tox. 1: Aspiration toxicity, Category 1
Carc. 2: Carcinogen, Category 2
Eye Dam. 1: Serious eye damage, Category 1
Eye Irrit. 2: Eye irritation, Category 2
Flam. Liq. 3: Flammable liquid, Category 3
Flam. Sol. 2: Flammable solid, Category 2
Muta. 2: Mutagen, Category 2
STOT SE 2: Specific target organ toxicity following a single exposure, Category 2
Skin Irrit. 2: Skin irritant, Category 2
Skin Sens. 1: Skin sensitiser, Category 1
Skin Sens. 1B: Skin sensitiser, Category 1B

Changes regarding to the previous version:

- Change in the hazard classification (SECTION 2.1).
- Changes in the composition of the product (SECTION 3.2).
- Modifications in the handling and storage precautions (SECTION 7.1).
- Modification in the values of the physical and chemical properties (SECTION 9).
- Change in the hazard classification (SECTION 11.1).
- National legislative changes (SECTION 15.1).

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

-Continued on next page.-

Physical hazards	On basis of test data
Health hazards	Calculation method
Environmental hazards	Calculation method

It is advisable to carry out basic training with regard to health and safety at work in order to handle this product correctly.

Abbreviations and acronyms used:
ADR: Agreement concerning the International Carriage of Dangerous Goods by Road.
BCF: Bioconcentration factor.
CEN: European Committee for Standardization.
DMEL: Derived Minimal Effect Level, exposure level corresponding to a low risk, that risk should be considered a tolerable minimum.
DNEL: Derived No Effect Level, level of exposure to the substance below which adverse effects are not anticipated.
EC50: Half maximal effective concentration.
PPE: Personal protection equipment.
IATA: International Air Transport Association.
ICAO: International Civil Aviation Organization.
IMDG: International Maritime Code for Dangerous Goods.
LC50: Lethal concentration, 50%.
LD50: Lethal dose, 50%.
NOEC: No observed effect concentration.
RID: Regulations Concerning the International Transport of Dangerous Goods by Rail.

Key literature references and sources for data:
http://eur-lex.europa.eu/homepage.html
http://echa.europa.eu/
Regulation (EU) 2020/878.
Regulation (EC) No 1907/2006.
Regulation (EC) No 1272/2008.

The information given in this Safety Data Sheet has been drafted in accordance with COMMISSION REGULATION (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemical substances and mixtures (REACH).

The information in this Safety Data Sheet on the Preparation is based on current knowledge and on current EC and national laws, as far as the working conditions of the users is beyond our knowledge and control. The product must not be used for purposes other than those that are specified without first having written instructions on how to handle. It is always the responsibility of the user to take the appropriate measures in order to comply with the requirements established by current legislation. The information contained in this Safety Sheet only states a description of the safety requirements for the preparation, and it must not be considered as a guarantee of its properties.

-End of safety data sheet.-