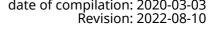
acc. to Regulation (EC) No. 1907/2006 (REACH)

Oil of anise, natural

article number: 7036 date of compilation: 2020-03-03 Version: **2.0 en**

Replaces version of: 2020-03-03

Version: (1)



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

Product identifier 1.1

Identification of the substance Oil of anise, natural

Article number 7036

EC number 283-518-1 CAS number 84650-59-9 Alternative name(s) Oleum Anisi

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

Relevant identified uses: Laboratory chemical

Laboratory and analytical use

Uses 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

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:

sicherheit@carlroth.de e-mail (competent person):

1.4 **Emergency telephone number**

Name	Street	Postal code/city	Telephone	Website
National Poisons Information Service City Hospital	Dudley Rd	B187QH Birmingham	844 892 0111	

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification acc. to GHS

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Section	Hazard class	Cat- egory	Hazard class and category	Hazard statement
3.45	Skin sensitisation	1	Skin Sens. 1	H317
3.5	Germ cell mutagenicity	2	Muta. 2	H341
3.6	Carcinogenicity	2	Carc. 2	H351
4.1C	Hazardous to the aquatic environment - chronic hazard	2	Aquatic Chronic 2	H411

For full text of abbreviations: see SECTION 16

The most important adverse physicochemical, human health and environmental effects

Spillage and fire water can cause pollution of watercourses.

2.2 Label elements

Labelling

Signal word Warning

Pictograms

GHS07, GHS08, GHS09







Hazard statements

H317	May cause an allergic skin reaction
H341	Suspected of causing genetic defects
H351	Suspected of causing cancer
11/11	Tayle to accept a life with land lasting offerto

H411 Toxic to aquatic life with long lasting effects

Precautionary statements

Precautionary statements - prevention

P273 Avoid release to the environment P280 Wear protective gloves/eye protection

Precautionary statements - response

P302+P352 IF ON SKIN: Wash with plenty of soap and water P308+P313 IF exposed or concerned: Get medical advice/attention

For professional users only

2.3 Other hazards

Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB.

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SECTION 3: Composition/information on ingredients

3.1 Substances

"UVCB substance" (substance of unknown or variable composition).

Name of substance Oil of anise CAS No 84650-59-9 EC No 283-518-1

Impurities/additives/constituents:

Name of substance	Identifier	Wt%
Anethole	CAS No 4180-23-8	75 – < 90
	EC No 224-052-0	
Methylchavicol	CAS No 140-67-0	1-<5
	EC No 205-427-8	
D-(+)-Limonene	CAS No 5989-27-5	1-<5
	EC No 227-813-5	
Linalool	CAS No 78-70-6	1-<5
	EC No 201-134-4	
Myrcene	CAS No 123-35-3	<1
	EC No 204-622-5	
Terpinolene	CAS No 586-62-9	<1
	EC No 209-578-0	
DL-α-Pinene	CAS No 80-56-8	<1
	EC No 201-291-9	

For full text of abbreviations: see SECTION 16

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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

After contact with skin, wash immediately with plenty of water. In case of skin reactions, consult a physician.

Following eye contact

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

Following ingestion

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

4.2 Most important symptoms and effects, both acute and delayed

Allergic reactions

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 spray, dry extinguishing powder, BC-powder, carbon dioxide (CO_2)

Unsuitable extinguishing media

water jet

5.2 Special hazards arising from the substance or mixture

Combustible.

Hazardous combustion products

Carbon monoxide (CO), Carbon dioxide (CO₂), May produce toxic fumes of carbon monoxide if burning.

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5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Do not allow firefighting water to enter drains or water courses. 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

Use personal protective equipment as required. Avoid contact with skin, eyes and clothes. Do not breathe vapour/spray.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains.

Advice on how to clean up a spill

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

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.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Provision of sufficient ventilation. Avoid exposure.

Measures to protect the environment

Avoid release to the environment.

Advice on general occupational hygiene

Wash hands before breaks and after work. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed.

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

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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 components of the mixture

Name of sub- stance	CAS No	End- point	Threshol d level	Protection goal, route of exposure	Used in	Exposure time
Anethole	4180-23-8	DNEL	10,57 mg/ m³	human, inhalat- ory	worker (industry)	chronic - systemic effects
Anethole	4180-23-8	DNEL	7,5 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
D-(+)-Limonene	5989-27-5	DNEL	66,7 mg/ m³	human, inhalat- ory	worker (industry)	chronic - systemic effects
D-(+)-Limonene	5989-27-5	DNEL	9,5 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
Linalool	78-70-6	DNEL	2,8 mg/m ³	human, inhalat- ory	worker (industry)	chronic - systemic effects
Linalool	78-70-6	DNEL	16,5 mg/ m³	human, inhalat- ory	worker (industry)	acute - systemic effects
Linalool	78-70-6	DNEL	2,5 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
Linalool	78-70-6	DNEL	5 mg/kg bw/day	human, dermal	worker (industry)	acute - systemic effects
DL-α-Pinene	80-56-8	DNEL	3,8 mg/m ³	human, inhalat- ory	worker (industry)	chronic - systemic effects
DL-α-Pinene	80-56-8	DNEL	0,542 mg/ kg bw/day	human, dermal	worker (industry)	chronic - 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
Anethole	4180-23-8	PNEC	0,021 ^{mg} / _l	aquatic organ- isms	freshwater	short-term (single instance)
Anethole	4180-23-8	PNEC	0,002 ^{mg} / _l	aquatic organ- isms	marine water	short-term (single instance)
Anethole	4180-23-8	PNEC	0,972 ^{mg} / _l	aquatic organ- isms	sewage treatment plant (STP)	short-term (single instance)
Anethole	4180-23-8	PNEC	0,166 ^{mg} / kg	aquatic organ- isms	freshwater sedi- ment	short-term (single instance)
Anethole	4180-23-8	PNEC	0,017 ^{mg} / kg	aquatic organ- isms	marine sediment	short-term (single instance)

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Relevant PNECs of components of the mixture Name of sub-End-**CAS No Threshol Organism Environmental Exposure time** d level stance point compartment 0,097 mg/ Anethole 4180-23-8 **PNEC** terrestrial organsoil short-term (single instance) isms kg 14 ^{µg}/_I D-(+)-Limonene 5989-27-5 **PNEC** short-term (single aquatic organfreshwater instance) isms 5989-27-5 **PNEC** $1,4 \, ^{\mu g}/_{l}$ D-(+)-Limonene aquatic organmarine water short-term (single isms instance) D-(+)-Limonene 5989-27-5 **PNEC** 1,8 ^{mg}/_I aquatic organsewage treatment short-term (single plant (STP) instance) isms $3,85 \frac{mg}{kq}$ D-(+)-Limonene 5989-27-5 **PNEC** aquatic organfreshwater sedishort-term (single isms ment instance) 0,385 ^{mg}/ short-term (single D-(+)-Limonene 5989-27-5 **PNEC** aquatic organmarine sediment isms instance) kg 0,763 ^{mg}/ D-(+)-Limonene 5989-27-5 PNFC terrestrial organshort-term (single soil isms instance) kg 78-70-6 $0.2 \, \text{mg/}_{1}$ short-term (single Linalool **PNEC** aquatic organfreshwater isms instance) $0.02 \, \text{mg/}_{1}$ Linalool 78-70-6 **PNEC** aquatic organmarine water short-term (single instance) isms 10 ^{mg}/₁ Linalool 78-70-6 **PNEC** aquatic organsewage treatment short-term (single isms plant (STP) instance) 2,22 ^{mg}/_{kg} Linalool 78-70-6 **PNEC** freshwater sedishort-term (single aquatic organisms ment instance) 0,222 mg/ Linalool 78-70-6 **PNEC** aquatic organmarine sediment short-term (single instance) isms kg 0,327 mg/ Linalool 78-70-6 **PNEC** terrestrial organsoil short-term (single isms instance) kg $0,606 \, \mu g/I$ DL-α-Pinene 80-56-8 **PNEC** aquatic organfreshwater short-term (single instance) isms DL-α-Pinene $0,061 \, \mu g/I$ short-term (single 80-56-8 PNFC aquatic organmarine water isms instance) DL-α-Pinene 80-56-8 **PNEC** $0.2 \, \text{mg/}_{1}$ aquatic organshort-term (single sewage treatment isms plant (STP) instance) $157 \,^{\mu g}/_{kg}$ DL-α-Pinene 80-56-8 **PNEC** aquatic organfreshwater sedishort-term (single isms ment instance) $15,7 \,^{\mu g}/_{kg}$ DL-α-Pinene short-term (single 80-56-8 **PNEC** aquatic organmarine sediment instance) isms $31,7^{\mu g}/_{kq}$ DL-α-Pinene 80-56-8 **PNEC** terrestrial organsoil short-term (single instance) isms

8.2 Exposure controls

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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. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. The times are approximate values from measurements at 22 °C and permanent contact. Increased temperatures due to heated substances, body heat etc. and a reduction of the effective layer thickness by stretching can lead to a considerable reduction of the breakthrough time. If in doubt, contact manufacturer. At an approx. 1.5 times larger / smaller layer thickness, the respective breakthrough time is doubled / halved. The data apply only to the pure substance. When transferred to substance mixtures, they may only be considered as a guide.

type of material

NBR (Nitrile rubber)

material thickness

0,4 mm

breakthrough times of the glove material

>480 minutes (permeation: level 6)

Splash protection - Protective gloves

• type of material: NBR (Nitrile rubber)

• material thickness: >0,11 mm

• breakthrough times of the glove material: >30 minutes (permeation: level 2)

other protection measures

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

Respiratory protection





Respiratory protection necessary at: Aerosol or mist formation. Type: A (against organic gases and vapours with a boiling point of > 65 °C , colour code: Brown).

Environmental exposure controls

Keep away from drains, surface and ground water.

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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state liquid

Colour clear - colourless - light yellow

Odour characteristic

Melting point/freezing point not determined

Boiling point or initial boiling point and boiling 232,9 °C at 100,7 kPa (ECHA)

range

Flammability this material is combustible, but will not ignite

readily

Lower and upper explosion limit not determined

Flash point 97,6 °C at 101,2 kPa (ECHA) Auto-ignition temperature 426 °C at 101,2 kPa (ECHA)

Decomposition temperature not relevant pH (value) not determined Kinematic viscosity not determined

Solubility(ies)

Water solubility (practically insoluble)

Partition coefficient

Partition coefficient n-octanol/water (log value): this information is not available

Soil organic carbon/water (log KOC) 1,491 (ECHA)

Vapour pressure 8,5 kPa at 20 °C

Density and/or relative density

Density $0.985 \, {}^{9}/_{cm^3}$ at 20 ${}^{\circ}$ C

Relative vapour density information on this property is not available

Particle characteristics not relevant (liquid)

Other safety parameters

Oxidising properties none

9.2 Other information

Information with regard to physical hazard hazard classes acc. to GHS

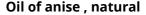
classes: (physical hazards): not relevant

Other safety characteristics:

Refractive index 1,553 – 1,556 (20 °C)

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SECTION 10: Stability and reactivity

10.1 Reactivity

This material is not reactive under normal ambient conditions.

If heated

Vapours may form explosive mixtures with air.

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 toxicological effects

Classification acc. to GHS

Acute toxicity

Shall not be classified as acutely toxic.

Acute toxicity

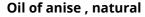
Exposure route	Endpoint Value		Species	Method	Source
oral	LD50	>2.000 - ≤2.500 ^{mg} / _{kg}	rat		ECHA
dermal	LD50	>2.000 ^{mg} / _{kg}	rat		ECHA

Acute toxicity of components of the mixture

Name of substance	CAS No	Exposure route	Endpoint	Value	Species
Anethole	4180-23-8	oral	LD50	≥2.330 - ≤4.00 0 ^{mg} / _{kg}	mouse
Anethole	4180-23-8	inhalation: dust/mist	LC50	≥5,1 ^{mg} / _l /4h	rat
Anethole	4180-23-8	dermal	LD50	>4.900 ^{mg} / _{kg}	rabbit
Methylchavicol	140-67-0	dermal	LD50	>5.000 ^{mg} / _{kg}	rabbit
Methylchavicol	140-67-0	oral	LD50	>300 – <2.000 ^{mg} / _{kg}	rat

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rabbit

Acute toxicity of components of the mixture Name of substance **CAS No Exposure Endpoint** Value **Species** route D-(+)-Limonene 5989-27-5 LD50 $>2.000 \, \text{mg/kg}$ oral rat $2.790 \, \text{mg/}_{ka}$ Linalool 78-70-6 oral LD50 rat 78-70-6 LD50 $5.610 \, \text{mg/kg}$ Linalool dermal rabbit >2.000 ^{mg}/_{kg} DL-α-Pinene 80-56-8 dermal LD50 rat DL-α-Pinene 80-56-8 oral LD50 $3.700 \, {\rm mg/_{kg}}$ rat Terpinolene 586-62-9 oral LD50 $>2.000 \, \text{mg/}_{kg}$ rat Terpinolene 586-62-9 dermal LD50 $>2.000 \, \text{mg/}_{ka}$ rat Myrcene 123-35-3 LD50 >3.380 ^{mg}/_{kg} oral mouse

dermal

LD50

 $>5.000 \, \text{mg/kg}$

Skin corrosion/irritation

Myrcene

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.

123-35-3

Respiratory or skin sensitisation

May cause an allergic skin reaction.

Germ cell mutagenicity

Suspected of causing genetic defects.

Carcinogenicity

Suspected of causing cancer.

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

Data are not available.

• If inhaled

Data are not available.

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• If on skin

May produce an allergic reaction, pruritis, localised redness

Other information

none

11.2 Endocrine disrupting properties

Not listed.

11.3 Information on other hazards

There is no additional information.

SECTION 12: Ecological information

12.1 Toxicity

Toxic to aquatic life with long lasting effects.

Aquatic toxicity (acute)

Endpoint	Value	Species	Source	Exposure time
EC50	29,96 ^{mg} / _l	aquatic invertebrates	ECHA	48 h
ErC50	6,18 ^{mg} / _l	algae	ECHA	72 h

Aquatic toxicity (acute) of components of the mixture

Name of sub- stance	CAS No	Endpoint	Value	Species	Exposure time
Anethole	4180-23-8	LC50	7 ^{mg} / _l	fish	96 h
Anethole	4180-23-8	EC50	4,25 ^{mg} / _l	aquatic invertebrates	48 h
Methylchavicol	140-67-0	EC50	17,58 ^{mg} / _l	aquatic invertebrates	48 h
Methylchavicol	140-67-0	ErC50	2,81 ^{mg} / _l	algae	72 h
D-(+)-Limonene	5989-27-5	LC50	0,46 ^{mg} / _l	fish	96 h
D-(+)-Limonene	5989-27-5	EC50	0,307 ^{mg} / _l	aquatic invertebrates	48 h
D-(+)-Limonene	5989-27-5	ErC50	0,32 ^{mg} / _l	algae	72 h
Linalool	78-70-6	LC50	27,8 ^{mg} / _l	fish	96 h
Linalool	78-70-6	EC50	59 ^{mg} / _l	aquatic invertebrates	48 h
Linalool	78-70-6	ErC50	156,7 ^{mg} / _l	algae	96 h
DL-α-Pinene	80-56-8	LC50	0,303 ^{mg} / _l	fish	96 h
DL-α-Pinene	80-56-8	EC50	0,475 ^{mg} / _l	aquatic invertebrates	48 h
Terpinolene	586-62-9	LC50	0,805 ^{mg} / _l	fish	96 h
Terpinolene	586-62-9	EC50	0,634 ^{mg} / _l	aquatic invertebrates	48 h
Terpinolene	586-62-9	ErC50	0,692 ^{mg} / _l	algae	72 h
Myrcene	123-35-3	EC50	1,47 ^{mg} / _l	aquatic invertebrates	48 h

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Aquatic toxicity (acute) of components of the mixture Name of sub-**CAS No Endpoint Value Species Exposure** time stance Myrcene 123-35-3 EC50 0,31 ^{mg}/_l 72 h algae ErC50 0,342 mg/1 72 h Myrcene 123-35-3 algae

Aquatic toxicity (chronic) of components of the mixture Name of sub-**CAS No Endpoint Value Species Exposure** stance time 2,81 ^{mg}/_l Anethole 4180-23-8 EC50 aquatic invertebrates 21 d <0,67 mg/1 D-(+)-Limonene 5989-27-5 EC50 fish 8 d 188 ^{µg}/_I 5989-27-5 EC50 21 d D-(+)-Limonene aquatic invertebrates >100 ^{mg}/_I Linalool 78-70-6 EC50 microorganisms 30 min 69 mg/_I Terpinolene 586-62-9 EC50 3 h microorganisms

Biodegradation

The substance is readily biodegradable.

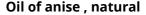
12.2 Process of degradability

Process of degradability					
Process	Degradation rate	Time			
oxygen depletion	62 %	28 d			

Degradability of components of the mixture Name of **CAS No Process** Degrada-**Time** Method Source substance tion rate Anethole 4180-23-8 78 % biotic/abiotic d Anethole 4180-23-8 oxygen deple-79 % 28 d **ECHA** tion Anethole 4180-23-8 carbon dioxide ≥90,7 - ≤91,2 % 28 d **ECHA** generation oxygen deple-Methylchavicol 140-67-0 46 % 10 d **ECHA** tion D-(+)-Limonene 5989-27-5 carbon dioxide 58,8 % 14 d **ECHA** generation oxygen deple-**ECHA** D-(+)-Limonene 5989-27-5 80 % 28 d tion Linalool 78-70-6 oxygen deple-40,9 % 5 d **ECHA** tion DL-α-Pinene 80-56-8 oxygen deple-68 % 28 d **ECHA** tion **ECHA** Terpinolene 586-62-9 oxygen deple-81 % 28 d tion

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Degradability of components of the mixture							
Name of substance	CAS No	Process	Degrada- tion rate	Time	Method	Source	
Myrcene	123-35-3	oxygen deple- tion	76 %	28 d		ECHA	

12.3 Bioaccumulative potential

Data are not available.

Bioaccumulative potentia	al of	f component	ts of	the mixt	ure

Name of substance	CAS No	BCF	Log KOW	BOD5/COD
Anethole	4180-23-8	79,92	3,39	
Methylchavicol	140-67-0		3,4 (pH value: 7, 25 °C)	
D-(+)-Limonene	5989-27-5		4,38 (pH value: 7,2, 37 °C)	
Linalool	78-70-6		2,9 (pH value: 7, 20 °C)	
DL-α-Pinene	80-56-8		4,83	
Terpinolene	586-62-9		4,47	
Myrcene	123-35-3		4,82 (pH value: ~6,5, 30 °C)	

12.4 Mobility in soil

The Organic Carbon normalised adsorption coefficient	1,491 (ECHA)
--	--------------

12.5 Results of PBT and vPvB assessment

Data are not available.

12.6 Endocrine disrupting properties

Not listed.

12.7 Other adverse effects

Data are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods



This material and its container must be disposed of as hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets

Waste treatment of containers/packagings

It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used.

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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).

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

ADRRID UN 3082
IMDG-Code UN 3082
ICAO-TI UN 3082

14.2 UN proper shipping name

ADRRID ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LI-

QUID, N.O.S.

IMDG-Code ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LI-

QUID, N.O.S.

ICAO-TI Environmentally hazardous substance, liquid,

n.o.s.

Technical name Oil of anise

14.3 Transport hazard class(es)

ADRRID 9
IMDG-Code 9
ICAO-TI 9

14.4 Packing group

ADRRID III
IMDG-Code III
ICAO-TI III

14.5 Environmental hazards hazardous to the aquatic environment

14.6 Special precautions for user

Provisions for dangerous goods (ADR) should be complied within the premises.

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

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

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LI-

QUID, N.O.S.

Particulars in the transport document UN3082, ENVIRONMENTALLY HAZARDOUS SUB-

STANCE, LIQUID, N.O.S., (Oil of anise), 9, III, (-)

Classification code M6

Danger label(s) 9, "Fish and tree"

Environmental hazards yes (hazardous to the aquatic environment)

Special provisions (SP) 274, 335, 375, 601

Excepted quantities (EQ) E1
Limited quantities (LQ) 5 L
Transport category (TC) 3
Tunnel restriction code (TRC) Hazard identification No 90

Emergency Action Code 3Z

Regulations concerning the International Carriage of Dangerous Goods by Rail (RID)Additional information

Classification code M6

Danger label(s) 9
Fish and tree

Environmental hazards Yes

Hazardous to water

Special provisions (SP) 274, 335, 375, 601

Excepted quantities (EQ) E1
Limited quantities (LQ) 5 L
Transport category (TC) 3
Hazard identification No 90

International Maritime Dangerous Goods Code (IMDG) - Additional information

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LI-

QUID, N.O.S.

Particulars in the shipper's declaration UN3082, ENVIRONMENTALLY HAZARDOUS SUB-

STANCE, LIQUID, N.O.S., (Oil of anise), 9, III

Marine pollutant yes (hazardous to the aquatic environment), (Oil of anise)

Danger label(s) 9, "Fish and tree"

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Special provisions (SP) 274, 335, 969

Excepted quantities (EQ) E1 Limited quantities (LQ) 5 L **EmS** F-A, S-F

Stowage category

International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information

Proper shipping name Environmentally hazardous substance, liquid,

n.o.s.

Particulars in the shipper's declaration UN3082, Environmentally hazardous substance,

liquid, n.o.s., (Oil of anise), 9, III

Environmental hazards yes (hazardous to the aquatic environment)

Danger label(s) 9, "Fish and tree"

Special provisions (SP) A97, A158, A197, A215

Excepted quantities (EQ) E1

Limited quantities (LQ) 30 kg

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)

Seveso Directive

2012/	2012/18/EU (Seveso III)				
No	Dangerous substance/hazard categories	Qualifying quantity (tonnes) for the application of lower and upper-tier requirements		Notes	
E2	environmental hazards (hazardous to the aquatic environment, cat. 2)	200	500	57)	

57) Hazardous to the Aquatic Environment in category Chronic 2

Deco-Paint Directive

VOC content	100 % 985 ⁹ / _I
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Industrial Emissions Directive (IED)

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VOC content	100 %
VOC content	985 ^g / _l

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

not listed

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

not listed

Water Framework Directive (WFD)

List of pollutants (WFD)				
Name of substance	Name acc. to inventory	CAS No	Listed in	Remarks
Oil of anise	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)	

Legend

A) Indicative list of the main pollutants

Regulation on the marketing and use of explosives precursors

not listed

Regulation on drug precursors

not listed

Regulation on substances that deplete the ozone layer (ODS)

not listed

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

not listed

Regulation on persistent organic pollutants (POP)

not listed

National regulations(GB)

List of substances subject to authorisation (GB REACH, Annex 14) / SVHC - candidate list not listed

Restrictions according to GB REACH, Annex 17

Dangerous substances with restrictions (GB REACH, Annex 17) Name of substance Name acc. to inventory CAS No No Oil of anise this product meets the criteria for classification in accordance with Regulation No 1272/2008/EC 3

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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	AIIC	substance is listed
CN	IECSC	substance is listed
EU	ECSI	substance is listed
EU	REACH Reg.	substance is listed
NZ	NZIoC	substance is listed
PH	PICCS	substance is listed
TW	TCSI	substance is listed

Legend

Australian Inventory of Industrial Chemicals EC Substance Inventory (EINECS, ELINCS, NLP) Inventory of Existing Chemical Substances Produced or Imported in China AIIC **ECSI**

NZIOC New Zealand Inventory of Chemicals
PICCS Philippine Inventory of Chemicals and Chemical Substances (PICCS)
REACH Reg.
REACH registered substances
TCSI Taiwan Chemical Substance Inventory

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance.

SECTION 16: Other information

Indication of changes (revised safety data sheet)

Alignment to regulation:

Restructuring: section 9, section 14

Section	Former entry (text/value)	Actual entry (text/value)	Safety- relev- ant
2.1		Classification acc. to GHS: change in the listing (table)	yes
2.1		The most important adverse physicochemical, human health and environmental effects: Spillage and fire water can cause pollution of watercourses.	yes
2.2	Labelling of packages where the contents do not exceed 125 ml: Signal word: Warning		yes
2.2		Labelling of packages where the contents do not exceed 125 ml: change in the listing (table)	yes
2.2		Labelling of packages where the contents do not exceed 125 ml: change in the listing (table)	yes
2.2		Labelling of packages where the contents do not exceed 125 ml: change in the listing (table)	yes

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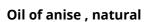
Section	Former entry (text/value)	Actual entry (text/value)	Safety- relev- ant
2.3	Other hazards: There is no additional information.	Other hazards	yes
2.3		Results of PBT and vPvB assessment: According to the results of its assessment, this substance is not a PBT or a vPvB.	yes

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
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)
BCF	Bioconcentration factor
BOD	Biochemical Oxygen Demand
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
COD	Chemical oxygen demand
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 identifier of substances commercially available within the EU (European Union)
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
EmS	Emergency Schedule
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
GB REACH	The REACH etc. (Amendment etc.) (EU Exit) Regulations 2019, SI 2019/758 (as amended)
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
ICAO-TI	Technical instructions for the safe transport of dangerous goods by air
IMDG	International Maritime Dangerous Goods Code
IMDG-Code	International Maritime Dangerous Goods Code
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 selections as specified time interval
LD50	Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during specified time interval

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Abbr.	Descriptions of used abbreviations
log KOW	n-Octanol/water
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 (Regulations concerning the International carriage of Dangerous goods by Rail)
VOC	Volatile Organic Compounds
vPvB	Very Persistent and very Bioaccumulative

Key literature references and sources for data

Agreement concerning the International Carriage of Dangerous Goods by Road (ADR). Regulations concerning the International Carriage of Dangerous Goods by Rail (RID). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

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

Code	Text
H317	May cause an allergic skin reaction.
H341	Suspected of causing genetic defects.
H351	Suspected of causing cancer.
H411	Toxic to aquatic life with long lasting effects.

Disclaimer

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

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