

**Safety Data Sheet**

according to UN GHS (ST/SG/AC.10/11/Rev.9)

**NATURAL DECANAL 50% ENRICHED ORANGE OIL FRACTION**

Revision date: 27.07.2023

Product code: 236210WW

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**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

NATURAL DECANAL 50% ENRICHED ORANGE OIL FRACTION

CAS No: 68606-94-0

**1.2. Relevant identified uses of the substance or mixture and uses advised against****1.3. Details of the supplier of the safety data sheet**

Company name:	Axxence Aromatic GmbH	
Street:	Tackenweide 28	
Place:	D-46446 Emmerich am Rhein	
Telephone:	+ 49 2822 68561 0	Telefax: + 49 2822 68561 39
e-mail:	info@axxence.com	
Contact person:	Andreas Goertz	Telephone: + 49 2822 68561 37
e-mail:	andreas.goertz@axxence.com	
Internet:	www.axxence.de	
Responsible Department:	QM - Regulatory Affairs	

**1.4. Emergency telephone number:** +49 2822 68561 99**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****UN GHS (ST/SG/AC.10/11/Rev.9)**

Flammable liquid: Flam. Liq. 4  
Skin corrosion/irritation: Skin Irrit. 2  
Serious eye damage/eye irritation: Eye Irrit. 2  
Respiratory or skin sensitisation: Skin Sens. 1  
Hazardous to the aquatic environment: Aquatic Chronic 3  
Hazardous to the aquatic environment: Aquatic Acute 2

**2.2. Label elements****UN GHS (ST/SG/AC.10/11/Rev.9)****Hazard components for labelling**

NATURAL LINALOOL  
NATURAL CITRAL  
NATURAL CITRONELLAL  
PERILLA ALDEHYDE

**Signal word:** Warning**Pictograms:****Hazard statements**

H227	Combustible liquid.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H401	Toxic to aquatic life.
H412	Harmful to aquatic life with long lasting effects.

**Precautionary statements**

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No
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P261	smoking.
P272	Avoid breathing dust/fume/gas/mist/vapours/spray.
P273	Contaminated work clothing should not be allowed out of the workplace.
P280	Avoid release to the environment.
P302+P352	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P333+P317	IF ON SKIN: Wash with plenty of water.
P362+P364	If skin irritation or rash occurs: Get medical help.
P305+P351+P338	Take off contaminated clothing and wash it before reuse.
P337+P317	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P370+P378	If eye irritation persists: Get medical help.
P403	In case of fire: Use Carbon dioxide (CO <sub>2</sub> ) / Foam / Extinguishing powder to extinguish.
P501	Store in a well-ventilated place.
	Dispose of contents/container to .

#### 2.3. Other hazards

No information available.

### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

##### Hazardous components

CAS No	Chemical name	Quantity
	Classification (UN GHS (ST/SG/AC.10/11/Rev.9))	
112-31-2	NATURAL ALDEHYDE C-10 (DECANAL)	55 - < 60 %
	Eye Irrit. 2, Aquatic Acute 2; H319 H401	
78-70-6	NATURAL LINALOOL	10 - < 15 %
	Acute Tox. 5, Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1B, Aquatic Acute 3; H303 H315 H319 H317 H402	
5392-40-5	NATURAL CITRAL	10 - < 15 %
	Acute Tox. 5, Skin Irrit. 2, Eye Irrit. 2A, Skin Sens. 1, Aquatic Acute 2; H313 H315 H319 H317 H401	
98-55-5	NATURAL ALPHA-TERPINEOL	5 - < 10 %
	Acute Tox. 5, Skin Irrit. 2, Eye Irrit. 2, Aquatic Acute 3; H303 H315 H319 H402	
106-23-0	NATURAL CITRONELLAL	5 - < 10 %
	Acute Tox. 5, Acute Tox. 5, Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1, Aquatic Acute 2; H313 H303 H315 H319 H317 H401	
562-74-3	NATURAL 4-TERPINENOL	1 - < 5 %
	Acute Tox. 4, Acute Tox. 5, Skin Irrit. 2, Eye Irrit. 2; H302 H313 H315 H319	
111-87-5	NATURAL 1-OCTANOL	1 - < 5 %
	Eye Irrit. 2, Aquatic Acute 2, Aquatic Chronic 3; H319 H401 H412	
2111-75-3	PERILLA ALDEHYDE	1 - < 5 %
	Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2A, Skin Sens. 1A; H302 H315 H319 H317	
106-22-9	NATURAL CITRONELLOL	< 1 %
	Acute Tox. 5, Acute Tox. 5, Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1, Aquatic Acute 2; H313 H303 H315 H319 H317 H401	
5989-27-5	(R)-p-mentha-1,8-diene, d-limonene	< 1 %
	Flam. Liq. 3, Skin Irrit. 2, Skin Sens. 1, Asp. Tox. 1, Aquatic Acute 1, Aquatic Chronic 1; H226 H315 H317 H304 H400 H410	

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#### SECTION 4: First aid measures

##### 4.1. Description of first aid measures

###### **After inhalation**

Provide fresh air. When in doubt or if symptoms are observed, get medical advice.

###### **After contact with skin**

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. Medical treatment necessary.

###### **After contact with eyes**

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

###### **After ingestion**

Observe risk of aspiration if vomiting occurs. Rinse mouth immediately and drink 1 glass of water.

##### 4.2. Most important symptoms and effects, both acute and delayed

No information available.

##### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

#### SECTION 5: Firefighting measures

##### 5.1. Extinguishing media

###### **Suitable extinguishing media**

Co-ordinate fire-fighting measures to the fire surroundings.

##### 5.2. Special hazards arising from the substance or mixture

Non-flammable. Vapours can form explosive mixtures with air.

##### 5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

###### **Additional information**

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

#### SECTION 6: Accidental release measures

##### 6.1. Personal precautions, protective equipment and emergency procedures

###### **General advice**

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

##### 6.2. Environmental precautions

Do not allow to enter into surface water or drains.

##### 6.3. Methods and material for containment and cleaning up

###### **For cleaning up**

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

###### **Other information**

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

##### 6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

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Disposal: see section 13

**SECTION 7: Handling and storage****7.1. Precautions for safe handling****Advice on safe handling**

No special measures are necessary.

**Advice on protection against fire and explosion**

No special fire protection measures are necessary.

**Advice on general occupational hygiene**

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat, drink, smoke, sniff. Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat, drink, smoke, sniff.

**7.2. Conditions for safe storage, including any incompatibilities****Requirements for storage rooms and vessels**

Keep container tightly closed.

**Hints on joint storage**

No special measures are necessary.

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters****8.2. Exposure controls****Individual protection measures, such as personal protective equipment****Eye/face protection**

Suitable eye protection: goggles.

**Hand protection**

Suitable gloves type: Disposable gloves + NBR (Nitrile rubber)

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. 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.

**Skin protection**

Use of protective clothing.

**Respiratory protection**

In case of inadequate ventilation wear respiratory protection.

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

Physical state:

Liquid

Colour:

light yellow

Melting point/freezing point:

not determined

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Boiling point or initial boiling point and boiling range:	195 °C
Flammability:	not determined
Lower explosion limits:	0,9 vol. %
Upper explosion limits:	5,2 vol. %
Flash point:	85 °C
Auto-ignition temperature:	195 °C
Decomposition temperature:	not determined
pH-Value:	not determined
Water solubility:	No
Solubility in other solvents not determined	
Partition coefficient n-octanol/water:	not determined
Vapour pressure: (at 20 °C)	0,16 hPa
Vapour pressure: (at 50 °C)	2 hPa
Density (at 20 °C):	0,85 g/cm <sup>3</sup>
Relative vapour density:	not determined

#### **9.2. Other information**

##### **Information with regard to physical hazard classes**

###### Explosive properties

The product is not: Explosive. not explosive according to EU A.14

###### Oxidizing properties

The product is not: oxidising.

##### **Other safety characteristics**

Evaporation rate: not determined

Solvent content: 0%

Solid content: 0%

### SECTION 10: Stability and reactivity

#### **10.1. Reactivity**

No hazardous reaction when handled and stored according to provisions.

#### **10.2. Chemical stability**

The product is stable under storage at normal ambient temperatures.

#### **10.3. Possibility of hazardous reactions**

No known hazardous reactions.

#### **10.4. Conditions to avoid**

none

#### **10.5. Incompatible materials**

No information available.

#### **10.6. Hazardous decomposition products**

No known hazardous decomposition products.

### SECTION 11: Toxicological information

#### **11.1. Information on toxicological effects**

##### **Acute toxicity**

Based on available data, the classification criteria are not met.

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**ATEmix calculated**

ATE (oral) 8819,1 mg/kg; ATE (dermal) 13888,9 mg/kg

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CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
112-31-2	NATURAL ALDEHYDE C-10 (DECANAL)				
	oral	LD50 >5000 mg/kg	Rat	REACH Dossier	
	dermal	LD50 >5000 mg/kg	Rabbit	REACH Dossier	
78-70-6	NATURAL LINALOOL				
	oral	LD50 2790 mg/kg	Rat	REACH registration	OECD 401
	dermal	LD50 5610 mg/kg	Rabbit	REACH registration	OECD 402
5392-40-5	NATURAL CITRAL				
	oral	LD50 6800 mg/kg	Rat	REACH registration	
	dermal	LD50 >2000 mg/kg	Rat	REACH registration	
98-55-5	NATURAL ALPHA-TERPINEOL				
	oral	LD50 4300 mg/kg	Rat	REACH Dossier	OECD 401
	dermal	LD50 >2000 mg/kg	Rat	REACH Dossier	OECD 402
106-23-0	NATURAL CITRONELLAL				
	oral	LD50 2423 mg/kg	Rat	REACH Registration	OECD 401
	dermal	LD50 >2500 mg/kg	Rabbit	REACH Registration	
562-74-3	NATURAL 4-TERPINENOL				
	oral	LD50 1300 mg/kg	Rat	REACH registration	OECD 401
	dermal	LD50 >2500 mg/kg	Rabbit	REACH registration	OECD 402
111-87-5	NATURAL 1-OCTANOL				
	oral	LD50 >5000 mg/kg	Rat	REACH Registration	OECD 401
	dermal	LD50 >5000 mg/kg	Rat	REACH Registration	EPA OPPTS 870.1200
2111-75-3	PERILLA ALDEHYDE				
	oral	LD50 1720 mg/kg	Mouse		
	dermal	LD50 >5000 mg/kg	Pig		
106-22-9	NATURAL CITRONELLOL				
	oral	LD50 3450 mg/kg	Rat	REACH Registration	
	dermal	LD50 2650 mg/kg	Rabbit	REACH Registration	
5989-27-5	(R)-p-mentha-1,8-diene, d-limonene				
	oral	LD50 5300 mg/kg	Rat	IFA GESTIS	

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	dermal	LD50 mg/kg	>5000	Rabbit	REACH registration	OECD 402
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**Irritation and corrosivity**

Causes skin irritation.  
Causes serious eye irritation.

**Sensitising effects**

May cause an allergic skin reaction. (NATURAL LINALOOL; NATURAL CITRAL; NATURAL CITRONELLAL; PERILLA ALDEHYDE; NATURAL CITRONELLOL; (R)-p-mentha-1,8-diene, d-limonene)

**Carcinogenic/mutagenic/toxic effects for reproduction**

Based on available data, the classification criteria are not met.

**STOT-single exposure**

Based on available data, the classification criteria are not met.

**STOT-repeated exposure**

Based on available data, the classification criteria are not met.

**Aspiration hazard**

Based on available data, the classification criteria are not met.

**11.2. Information on other hazards**

**Other information**

No information available.

**Further information**

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

### SECTION 12: Ecological information

**12.1. Toxicity**

Harmful to aquatic life with long lasting effects.



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CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
112-31-2	NATURAL ALDEHYDE C-10 (DECANAL)					
	Acute fish toxicity	LC50 1,45 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)	REACH Dossier	OECD 203
	Acute algae toxicity	ErC50 4,5 mg/l	72 h	Pseudokirchneriella subcapitata	REACH Dossier	OECD 201
	Acute crustacea toxicity	EC50 1,17 mg/l	48 h	Daphnia magna (Big water flea)	REACH Dossier	OECD 202
	Acute bacteria toxicity	(EC50 70 mg/l)	3 h	Activated sludge	REACH Dossier	OECD 209
78-70-6	NATURAL LINALOOL					
	Acute fish toxicity	LC50 27,8 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)	REACH registration	OECD 203
	Acute algae toxicity	ErC50 88,3 mg/l	96 h	Desmodesmus subspicatus	REACH registration	DIN 38412 L9
	Acute crustacea toxicity	EC50 59 mg/l	48 h	Daphnia magna (Big water flea)	REACH registration	OECD 202
	Acute bacteria toxicity	(EC50 >100 mg/l)	0,5 h	Activated sludge	REACH registration	OECD 209
5392-40-5	NATURAL CITRAL					
	Acute fish toxicity	LC50 6,78 mg/l	96 h	Leuciscus idus (golden orfe)	REACH registration	DIN 38412 L
	Acute algae toxicity	ErC50 103,8 mg/l	72 h	Desmodesmus subspicatus	REACH registration	DIN 38412 L9
	Acute crustacea toxicity	EC50 6,8 mg/l	48 h	Daphnia magna (Big water flea)	REACH registration	Directive 79/831 EWG, C2 annex V
	Fish toxicity	NOEC 4,6 mg/l	4 d	Leuciscus idus (golden orfe)	REACH registration	DIN 38412 L
	Acute bacteria toxicity	(EC50 160 mg/l)	0,5 h	Activated sludge	REACH registration	OECD 209
98-55-5	NATURAL ALPHA-TERPINEOL					
	Acute fish toxicity	LC50 70 mg/l	96 h	Danio rerio (zebrafish)	REACH Registration	OECD 203
	Acute algae toxicity	ErC50 68 mg/l	72 h	Pseudokirchneriella subcapitata	REACH Registration	OECD 201
	Acute crustacea toxicity	EC50 73 mg/l	48 h	Daphnia magna (Big water flea)	REACH Registration	OECD 202
106-23-0	NATURAL CITRONELLAL					
	Acute fish toxicity	LC50 22 mg/l	96 h	Leuciscus idus (golden orfe)	REACH Registration	OECD 203
	Acute algae toxicity	ErC50 13,33 mg/l	72 h	Desmodesmus subspicatus	REACH Registration	DIN 38412, Part 9
	Acute crustacea toxicity	EC50 8,7 mg/l	48 h	Daphnia magna (Big water flea)	REACH Registration	OECD 202
111-87-5	NATURAL 1-OCTANOL					
	Acute fish toxicity	LC50 13,3 mg/l	96 h	Pimephales promelas (fathead minnow)	REACH Registration	OECD 203
	Acute algae toxicity	ErC50 6,5 mg/l		Desmodesmus subspicatus	REACH Registration	OECD 201
	Acute crustacea toxicity	EC50 20 mg/l	48 h	Daphnia magna (Big water flea)	REACH Registration	OECD 202

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	Fish toxicity	NOEC	1,5 mg/l	7 d	Pimephales promelas (fathead minnow)	REACH Registration	
	Crustacea toxicity	NOEC	1 mg/l	21 d	Daphnia magna (Big water flea)	REACH Registration	OECD 211
	Acute bacteria toxicity	(EC50 mg/l)	350	3 h	Activated sludge	REACH Registration	OECD 209
106-22-9	NATURAL CITRONELLOL						
	Acute fish toxicity	LC50 mg/l	14,66	96 h	Leuciscus idus (golden orfe)	REACH registration	DIN 38 412, part L15
	Acute algae toxicity	ErC50	2,4 mg/l	72 h	Desmodesmus subspicatus	REACH registration	
	Acute crustacea toxicity	EC50 mg/l	17,48	48 h	Daphnia magna (Big water flea)	REACH registration	EU Directive 79/831/EEC, Annex V, part C
	Fish toxicity	NOEC	4,6 mg/l	4 d	Leuciscus idus (golden orfe)	REACH registration	DIN 38 412, part L15
	Crustacea toxicity	NOEC	3,1 mg/l	2 d	Daphnia magna (Big water flea)	REACH registration	EU Directive 79/831/EEC, Annex V, part C
	Acute bacteria toxicity	(EC50 mg/l)	>10000	0,5 h	Pseudomonas putida	REACH registration	DIN 38412 Part 27
5989-27-5	(R)-p-mentha-1,8-diene, d-limonene						
	Acute fish toxicity	LC50 mg/l	0,72	96 h	Pimephales promelas (fathead minnow)	REACH registration	OECD 203
	Acute algae toxicity	ErC50 mg/l	0,32	72 h	Pseudokirchneriella subcapitata	REACH registration	OECD 201
	Acute crustacea toxicity	EC50 mg/l	0,307	48 h	Daphnia magna (Big water flea)	REACH registration	OECD 202
	Fish toxicity	NOEC mg/l	0,37	8 d	Pimephales promelas (fathead minnow)	REACH Registration	OECD 212
	Acute bacteria toxicity	(EC50 mg/l)	209	3 h	Activated sludge	REACH registration	OECD 209

#### **12.2. Persistence and degradability**

The product has not been tested.

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CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
112-31-2	NATURAL ALDEHYDE C-10 (DECANAL)			
	OECD 301F	50%	7	REACH Registration
	Readily biodegradable (according to OECD criteria).			
	OECD 301F	76%	21	REACH Registration
	Readily biodegradable (according to OECD criteria).			
	OECD 301F	82%	28	REACH Registration
	Readily biodegradable (according to OECD criteria).			
78-70-6	NATURAL LINALOOL			
	OECD 301D	64,2%	28	REACH registration
	Readily biodegradable (according to OECD criteria).			
	OECD 301D	60,5%	15	REACH registration
	Readily biodegradable (according to OECD criteria).			
	OECD 301D	40,9%	5	REACH registration
	Readily biodegradable (according to OECD criteria).			
5392-40-5	NATURAL CITRAL			
	OECD 301C	85-95%	28	REACH registration
	Readily biodegradable (according to OECD criteria).			
98-55-5	NATURAL ALPHA-TERPINEOL			
	OECD 310	80%	28	REACH Registration
	Readily biodegradable (according to OECD criteria).			
	OECD 310	60%	12	REACH Registration
	Readily biodegradable (according to OECD criteria).			
	OECD 310	10%	5	REACH Registration
	Readily biodegradable (according to OECD criteria).			
106-23-0	NATURAL CITRONELLAL			
	OECD 301B	83%	28	REACH Registration
	Readily biodegradable (according to OECD criteria).			
	OECD 301B	63%	14	REACH Registration
	Readily biodegradable (according to OECD criteria).			
	OECD 301B	22%	5	REACH Registration
	Readily biodegradable (according to OECD criteria).			
562-74-3	NATURAL 4-TERPINENOL			
		79%	28	REACH registration
	ready biodegradability			
111-87-5	NATURAL 1-OCTANOL			
	OECD 301B	92%	28	REACH Registration
	Readily biodegradable (according to OECD criteria).			
106-22-9	NATURAL CITRONELLOL			
	OECD 301 F	90%	28	REACH Registration
	Readily biodegradable (according to OECD criteria).			
	OECD 301 F	72%	14	REACH Registration
	Readily biodegradable (according to OECD criteria).			
	OECD 301 F	37%	5	REACH Registration
	Readily biodegradable (according to OECD criteria).			
5989-27-5	(R)-p-mentha-1,8-diene, d-limonene			
	OECD 301D	80%	28	REACH Registration
	Readily biodegradable (according to OECD criteria).			

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	OECD 301D	71%	14	REACH Registration
	Readily biodegradable (according to OECD criteria).			
	OECD 301D	41%	7	REACH Registration
	Readily biodegradable (according to OECD criteria).			

#### **12.3. Bioaccumulative potential**

The product has not been tested.

#### **Partition coefficient n-octanol/water**

CAS No	Chemical name	Log Pow
112-31-2	NATURAL ALDEHYDE C-10 (DECANAL)	3,8
78-70-6	NATURAL LINALOOL	2,97
5392-40-5	NATURAL CITRAL	2,76
98-55-5	NATURAL ALPHA-TERPINEOL	2,67
106-23-0	NATURAL CITRONELLAL	3,62
562-74-3	NATURAL 4-TERPINENOL	3,26
111-87-5	NATURAL 1-OCTANOL	3,5
2111-75-3	PERILLA ALDEHYDE	3,053
106-22-9	NATURAL CITRONELLOL	3,41
5989-27-5	(R)-p-mentha-1,8-diene, d-limonene	4,5

#### **BCF**

CAS No	Chemical name	BCF	Species	Source
112-31-2	NATURAL ALDEHYDE C-10 (DECANAL)	309		
5392-40-5	NATURAL CITRAL	89,72		
98-55-5	NATURAL ALPHA-TERPINEOL	32,4		
106-23-0	NATURAL CITRONELLAL	113,6		REACH Registration
111-87-5	NATURAL 1-OCTANOL	9,1		
106-22-9	NATURAL CITRONELLOL	82,59		REACH registration
5989-27-5	(R)-p-mentha-1,8-diene, d-limonene	690,1	aquatic species	REACH registration

#### **12.4. Mobility in soil**

The product has not been tested.

#### **12.6. Endocrine disrupting properties**

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

#### **12.7. Other adverse effects**

No information available.

#### **Further information**

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

### SECTION 13: Disposal considerations

#### **13.1. Waste treatment methods**

##### **Disposal recommendations**

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

##### **Contaminated packaging**

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

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#### SECTION 14: Transport information

##### Marine transport (IMDG)

<b>14.1. UN number or ID number:</b>	No dangerous good in sense of this transport regulation.
<b>14.2. UN proper shipping name:</b>	No dangerous good in sense of this transport regulation.
<b>14.3. Transport hazard class(es):</b>	No dangerous good in sense of this transport regulation.
<b>14.4. Packing group:</b>	No dangerous good in sense of this transport regulation.

##### Air transport (ICAO-TI/IATA-DGR)

<b>14.1. UN number or ID number:</b>	No dangerous good in sense of this transport regulation.
<b>14.2. UN proper shipping name:</b>	No dangerous good in sense of this transport regulation.
<b>14.3. Transport hazard class(es):</b>	No dangerous good in sense of this transport regulation.
<b>14.4. Packing group:</b>	No dangerous good in sense of this transport regulation.

##### 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

##### 14.6. Special precautions for user

No information available.

##### 14.7. Maritime transport in bulk according to IMO instruments

not applicable

#### SECTION 15: Regulatory information

##### National regulatory information

Employment restrictions:	Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).
Skin resorption/Sensitization:	Causes allergic hypersensitivity reactions.

#### SECTION 16: Other information

##### Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route  
(European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service

LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

CLP: Classification, labelling and Packaging

REACH: Registration, Evaluation and Authorization of Chemicals

GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals

UN: United Nations

DNEL: Derived No Effect Level

DMEL: Derived Minimal Effect Level

PNEC: Predicted No Effect Concentration

ATE: Acute toxicity estimate

LL50: Lethal loading, 50%

EL50: Effect loading, 50%

EC50: Effective Concentration 50%

ErC50: Effective Concentration 50%, growth rate

NOEC: No Observed Effect Concentration

BCF: Bio-concentration factor

**Safety Data Sheet**

according to UN GHS (ST/SG/AC.10/11/Rev.9)

**NATURAL DECANAL 50% ENRICHED ORANGE OIL FRACTION**

Revision date: 27.07.2023

Product code: 236210WW

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PBT: persistent, bioaccumulative, toxic

vPvB: very persistent, very bioaccumulative

RID: Regulations concerning the international carriage of dangerous goods by rail

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways  
(Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)

EmS: Emergency Schedules

MFAG: Medical First Aid Guide

ICAO: International Civil Aviation Organization

MARPOL: International Convention for the Prevention of Marine Pollution from Ships

IBC: Intermediate Bulk Container

VOC: Volatile Organic Compounds

SVHC: Substance of Very High Concern

For abbreviations and acronyms, see table at <http://abbrev.esdscom.eu>

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

**Further Information**

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

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*(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*