

Safety Data Sheet

according to 29 CFR 1910.1200(g)

NATURAL DECANAL 25% ENRICHED ORANGE OIL FRACTION

Revision date: 07/27/2023

Product code: 236200US

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1. Identification**Product identifier**

NATURAL DECANAL 25% ENRICHED ORANGE OIL FRACTION

CAS No: 68606-94-0

Recommended use of the chemical and restrictions on use**Use of the substance/mixture**

Manufacturing of: - Air care products - Perfumes, fragrances - Pharmaceuticals - Cosmetics, personal care products - Flavouring Substances - Other

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	

Emergency phone number: +49 2822 68561 99**2. Hazard(s) identification****Classification of the chemical****29 CFR Part 1910.1200**

Flammable liquids: Flam. Liq. 4
Skin corrosion/irritation: Skin Irrit. 2
Serious eye damage/eye irritation: Eye Irrit. 2A
Respiratory or skin sensitization: Skin Sens. 1

Label elements**29 CFR Part 1910.1200****Signal word:** Warning**Pictograms:****Hazard statements**

Combustible liquid
Causes skin irritation
May cause an allergic skin reaction
Causes serious eye irritation

Precautionary statements

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Avoid breathing dust/fume/gas/mist/vapors/spray.
Wash hands thoroughly after handling.
Contaminated work clothing must not be allowed out of the workplace.
Wear protective gloves/protective clothing/eye protection/face protection.
If on skin: Wash with plenty of water.
If skin irritation or rash occurs: Get medical advice/attention.
Take off contaminated clothing and wash it before reuse.

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If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 If eye irritation persists: Get medical advice/attention.
 In case of fire: Use Carbon dioxide (CO₂) / Foam / Extinguishing powder to extinguish.
 Store in a well-ventilated place.
 Dispose of contents/container to Organic waste.

Hazards not otherwise classified

No information available.

3. Composition/information on ingredients

Mixtures

Hazardous components

CAS No	Components	Quantity
112-31-2	NATURAL ALDEHYDE C-10 (DECANAL)	25 - 50 %
78-70-6	NATURAL LINALOOL	10 - 25 %
106-23-0	NATURAL CITRONELLAL	2,5 - 10 %
98-55-5	NATURAL ALPHA-TERPINEOL	2,5 - 10 %
5392-40-5	NATURAL CITRAL	2,5 - 10 %
111-87-5	NATURAL 1-OCTANOL	1,0 - 2,5 %
562-74-3	NATURAL 4-TERPINENOL	1,0 - 2,5 %
2111-75-3	PERILLA ALDEHYDE	1,0 - 2,5 %
106-22-9	NATURAL CITRONELLOL	<=1,0 %
5989-27-5	(R)-p-mentha-1,8-diene, d-limonene	<=1,0 %

4. First-aid measures

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.

Most important symptoms and effects, both acute and delayed

No information available.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.
 Carbon dioxide (CO₂) / Foam / Extinguishing powder

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Specific hazards arising from the chemical

Non-flammable. Vapors may form explosive mixtures with air.

Special protective equipment and precautions for fire-fighters

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

Additional information

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

6. Accidental release measures**Personal precautions, protective equipment and emergency procedures****General advice**

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

Environmental precautions

Do not allow to enter into surface water or drains.

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.

Reference to other sections

Safe handling: see section 7

Personal protection equipment (PPE): see section 8

Disposal: see section 13

7. Handling and storage**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.

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.

8. Exposure controls/personal protection**Control parameters**

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Exposure limits

CAS No	Substance	ppm	mg/m ³	f/cc	Category	Origin
5392-40-5	Citral (inhalable fraction and vapor)	5			TWA (8 h)	ACGIH-2022

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.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state:	Liquid	
Color:	light yellow	
Melting point/freezing point:		>35 °C
Boiling point or initial boiling point and boiling range:		195 °C
Flammability:		not determined
Lower explosion limits:		0,9 vol. %
Upper explosion limits:		6,1 vol. %
Flash point:		75 °C
Auto-ignition temperature:		195 °C
Decomposition temperature:		not determined
pH-Value:		not determined
Viscosity / kinematic: (at 20 °C)		18 mm ² /s
Water solubility:	The study does not need to be conducted because the substance is known to be insoluble in water.	
Solubility in other solvents	not determined	
Partition coefficient n-octanol/water:		not determined
Vapor pressure: (at 20 °C)		0,16 hPa
Vapor pressure: (at 50 °C)		2 hPa

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Density (at 20 °C): 0,86 g/cm³
Relative vapour density: not determined

Other information**Information with regard to physical hazard classes****Explosive properties**

The product is not: Explosive. not hazard of explosion 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%

10. Stability and reactivity**Reactivity**

No hazardous reaction when handled and stored according to provisions.

Chemical stability

The product is stable under storage at normal ambient temperatures.

Possibility of hazardous reactions

No known hazardous reactions.

Conditions to avoid

none/none

Incompatible materials

No information available.

Hazardous decomposition products

No known hazardous decomposition products.

11. Toxicological information**Information on toxicological effects****Acute toxicity**

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

ATEmix calculated

ATE (oral) 6262,9 mg/kg; ATE (dermal) 8349,1 mg/kg

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CAS No	Components				
	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
106-23-0	NATURAL CITRONELLAL				
	oral	LD50 2423 mg/kg	Rat	REACH Registration	OECD 401
	dermal	LD50 >2500 mg/kg	Rabbit	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
5392-40-5	NATURAL CITRAL				
	oral	LD50 6800 mg/kg	Rat	REACH registration	
	dermal	LD50 >2000 mg/kg	Rat	REACH registration	
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
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
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

Sensitizing effects

May cause an allergic skin reaction (NATURAL LINALOOL; NATURAL CITRONELLAL; NATURAL CITRAL; 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.

Specific target organ toxicity (STOT) - single exposure

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

Specific target organ toxicity (STOT) - repeated exposure

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

Carcinogenicity (OSHA): No ingredient of this mixture is listed.
 Carcinogenicity (IARC): d-Limonene (CAS 5989-27-5) is listed in group 3.
 Carcinogenicity (NTP): No ingredient of this mixture is listed.

Aspiration hazard

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

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].

12. Ecological information

Ecotoxicity

Harmful to aquatic life with long lasting effects.

Persistence and degradability

The product has not been tested.

Bioaccumulative potential

The product has not been tested.

Mobility in soil

The product has not been tested.

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.

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.

13. Disposal considerations

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.

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Contaminated packaging

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

14. Transport information**U.S. DOT 49 CFR 172.101**

Proper shipping name: No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

UN number or ID number: No dangerous good in sense of this transport regulation.

UN proper shipping name: No dangerous good in sense of this transport regulation.

Transport hazard class(es): No dangerous good in sense of this transport regulation.

Packing group: No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

UN number or ID number: No dangerous good in sense of this transport regulation.

UN proper shipping name: No dangerous good in sense of this transport regulation.

Transport hazard class(es): No dangerous good in sense of this transport regulation.

Packing group: No dangerous good in sense of this transport regulation.

Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

Special precautions for user

No information available.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

not applicable

15. Regulatory information**U.S. Regulations****National regulatory information**

SARA Section 311/312 Hazards:

NATURAL ALDEHYDE C-10 (DECANAL) (112-31-2): Immediate (acute) health hazard

NATURAL LINALOOL (78-70-6): Immediate (acute) health hazard

NATURAL CITRONELLAL (106-23-0): Immediate (acute) health hazard

NATURAL ALPHA-TERPINEOL (98-55-5): Immediate (acute) health hazard

NATURAL CITRAL (5392-40-5): Immediate (acute) health hazard

NATURAL 1-OCTANOL (111-87-5): Immediate (acute) health hazard

NATURAL 4-TERPINENOL (562-74-3): Immediate (acute) health hazard

PERILLA ALDEHYDE (2111-75-3): Immediate (acute) health hazard

NATURAL CITRONELLOL (106-22-9): Immediate (acute) health hazard

(R)-p-mentha-1,8-diene, d-limonene (5989-27-5): Fire hazard, Immediate (acute) health hazard

State Regulations**Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65, State of California)**

This product can not expose you to chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

16. Other information**Changes**

Revision date: 07/27/2023

Revision No: 103

This data sheet contains changes from the previous version in section(s): 11.

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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
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).

Other data

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.

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