

Safety Data Sheet

according to UN GHS (ST/SG/AC.10/11/Rev.8)

NATURAL ALPHA-IONONE

Revision date: 29.10.2020

Product code: 259420WW

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P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P301+P317	IF SWALLOWED: Get medical help.
P403	Store in a well-ventilated place.
P501	Dispose of contents/container to .

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients**3.2. Mixtures**

Sum formula:	C ₁₃ H ₂₀ O
Molecular weight:	192,30

Hazardous components

CAS No	Chemical name	Quantity
	Classification (UN GHS (ST/SG/AC.10/11/Rev.8))	
127-41-3	NATURAL ALPHA-IONONE	95 - < 100 %
	Flam. Liq. 4, Acute Tox. 5, Aquatic Acute 2; H227 H303 H401	
14901-07-6	NATURAL BETA-IONONE	1 - < 5 %
	Acute Tox. 5, Aquatic Acute 2, Aquatic Chronic 2; H303 H401 H411	

SECTION 4: First aid measures**4.1. Description of first aid measures****After inhalation**

Provide fresh air.

After contact with skin

Wash with plenty of water. Take off contaminated clothing and wash it before reuse.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water.

After ingestion

Rinse mouth immediately and drink 1 glass of 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

In case of fire: Wear self-contained breathing apparatus.

Additional information

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

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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

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

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

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

Take off contaminated clothing. Wash hands before breaks and after work. 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

Wear eye/face protection.

Hand protection

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.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid	
Colour:		
		Test method
Melting point/freezing point:	-16 °C	
Boiling point or initial boiling point and boiling range:	237 °C	
Flammability		
Solid/liquid:	not applicable	
Gas:	not applicable	
Lower explosion limits:	not determined	
Upper explosion limits:	not determined	
Flash point:	87 °C	
Decomposition temperature:	not determined	
pH-Value (at 29 °C):	4,55	OECD 122
Viscosity / kinematic: (at 20 °C)	41,15 mm ² /s	
Water solubility: (at 25 °C)	0,059 g/L	
Solubility in other solvents	not determined	
Partition coefficient n-octanol/water:	3,896	
Vapour pressure: (at 20 °C)	0,0013 hPa	
Density (at 20 °C):	0,93 g/cm ³	
Relative vapour density: (at 20 °C)	7	

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

Self-ignition temperature

Solid:

not applicable

Gas:

not applicable

Oxidizing properties

Not oxidising.

Other safety characteristics

Evaporation rate:

not determined

Solvent content:

0%

Solid content:

0%

Viscosity / dynamic:

36,45 mPa·s

(at 20 °C)

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

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

ATEmix calculated

ATE (oral) 4590,0 mg/kg

Acute toxicity

CAS No	Chemical name					
	Exposure route	Dose		Species	Source	Method
127-41-3	NATURAL ALPHA-IONONE					
	oral	LD50 mg/kg	4590	Rat	REACH Dossier	
	dermal	LD50 mg/kg	>5000	Rabbit	REACH Dossier	
14901-07-6	NATURAL BETA-IONONE					
	oral	LD50 mg/kg	4590	Rat	REACH Dossier	
	dermal	LD50 mg/kg	>5000	Rabbit		
	inhalation (4 h) vapour	LC50 mg/l	538,49	Rat	REACH Dossier	

SECTION 12: Ecological information

12.1. Toxicity

Harmful to aquatic life with long lasting effects.

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] [d]	Species	Source	Method
127-41-3	NATURAL ALPHA-IONONE						
	Acute fish toxicity	LC50	6,8 mg/l	96 h	Leuciscus idus (golden orfe)	REACH Dossier	
	Acute algae toxicity	ErC50 mg/l	22,2	72 h	Desmodesmus subspicatus	REACH Dossier	
	Acute crustacea toxicity	EC50 mg/l	2,65	48 h	Daphnia magna (Big water flea)	REACH Dossier	
14901-07-6	NATURAL BETA-IONONE						
	Acute fish toxicity	LC50 mg/l	2,571	96 h	Oryzias latipes (Ricefish)	REACH Dossier	
	Acute algae toxicity	ErC50 mg/l	3,223	72 h	Selenastrum capricornutum	REACH Dossier	OECD 201
	Acute crustacea toxicity	EC50 mg/l	1,641	48 h	Daphnia magna (Big water flea)	REACH Dossier	

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12.2. Persistence and degradability

The product has not been tested.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
127-41-3	NATURAL ALPHA-IONONE			
	OECD 301B	75,4%	28	REACH Dossier
	inherently biodegradable			
14901-07-6	NATURAL BETA-IONONE			
		70-80%	28	
	Readily biodegradable			
		50%	38	REACH Dossier
	Readily biodegradable			

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
127-41-3	NATURAL ALPHA-IONONE	3,896
14901-07-6	NATURAL BETA-IONONE	4,42

BCF

CAS No	Chemical name	BCF	Species	Source
127-41-3	NATURAL ALPHA-IONONE	161	Fish	REACH Dossier
14901-07-6	NATURAL BETA-IONONE	159		REACH Dossier

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.

SECTION 14: Transport information

Marine transport (IMDG)

14.1. UN number or ID number:

No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name:

No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es):

No dangerous good in sense of this transport regulation.

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

Air transport (ICAO-TI/IATA-DGR)

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

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

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

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

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: Yes



Danger releasing substance: NATURAL ALPHA-IONONE

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).

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

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

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(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>

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.

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