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

1.1 Product identifier

Commercial name : **ENERGY**
UFI : FG20-M0W7-Y00K-US7S
European product categorisation system (EuPCS): PC-AIR-4 - Air care products for vehicles

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

Uses :

CONSUMER	PROFESSIONAL	INDUSTRIAL
EVA air freshener for small rooms		

Uses advises against : All those not expressly identified on the label
Life cycle stages : C-Consumer use

1.3 Details of the supplier of the safety data sheet

Joy Fragrances s.r.l.
Via Gavinana, 14 - 21052 BUSTO ARSIZIO (VA) – Italy
tel. +39 0331 536942 - www.mrandmrsfragrance.com
email competent person **info@joyfragrances.it**

1.4 Emergency telephone number

Joy Fragrances s.r.l. - Tel +39 +39 0331 536942 – from 09,30 to 12,30 – from 15,30 to 19,30

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

2.1.1 Classification in accordance with Regulation (EC) No 1272/2008:

The product is classified as dangerous pursuant to the provisions of Regulation (EC) 1272/2008 (CLP) (and subsequent amendments and adjustments), the product therefore requires a safety data sheet compliant with the provisions of Regulation (EU) 2020/878.

Hazard pictogram(s) : **GHS07**
Hazard Class and Notes Category Code(s) : Skin. Sens. 1, Aquatic Chronic 3.
Hazard statement Code(s) : H317 - May cause an allergic skin reaction.
H412 - Harmful to aquatic life with long lasting effects

2.1.2 Adverse Effects

The product, if brought into contact with the skin, can cause skin sensitization. The product is dangerous for the environment as it is harmful to aquatic organisms with long lasting effects.

2.2 Label elements

2.2.1 Label in accordance with Regulation (EC) No 1272/2008

Hazard pictogram(s) : GHS07

Signal Word Code(s) : WARNING
Hazard statement Code(s) : H317 - May cause an allergic skin reaction.
H412 - Harmful to aquatic life with long lasting effects
Suppl. Hazard statement Code(s) : None
Precautionary statements :

General

P101 - If medical advice is needed, have product container or label at hand.
P102 - Keep out of reach of children.

Prevention

P264 - Wash hands thoroughly after handling.
P273 - Avoid release to the environment.

Response

P302 + P352 - IF ON SKIN: Wash with plenty of water and soap
P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention

Disposal

P501 - Dispose of contents/container in accordance with local/ national regulation.

Contiene: Hydroxyisoehxyl 3-cyclohexene carboxaldheyde, Citronellol, Linalyl acetate, Linalool, Limonene, Lemongrass oil, Beta-pinenes, Allyl cycloexylpropionate.

2.2.2 Additional regulations to be implemented on the label

Regulation (EC) 648/2004 : Not applicable
Regulation (EU) 528/2012 : Not applicable

Additional information: Not a toy. Do not swallow. Do not leave the product exposed in environments with temperatures above 70°C. Do not use the product for purposes other than those intended. Only insert into the air vents. Avoid contact with shiny or metallic surfaces.

2.3 Other hazards

The mixture does NOT contain PBT / vPvB substances according to Regulation (EC) 1907/2006, annex XIII in concentrations equal to or greater than 0.1% by weight.
The mixture does NOT contain substances that have been included in the list established in accordance with Article 59, paragraph 1 due to properties of interference with the endocrine system in concentrations equal to or greater than 0.1% by weight.
The mixture does NOT contain a substance identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 in concentrations equal to or greater than 0.1% by weight.

ISO 8317_ Child-resistant packaging - Requirements and testing procedures for reclosable packages
EN 862_Child-resistant packaging - Requirements and testing procedures for non-reclosable packages for non-pharmaceutical products : Not applicable
Tactile warnings of danger (ISO 11683_Packaging - Tactile warnings of danger - Requirements) : Not applicable

SECTION 3: Composition/information on ingredients

3.1 Substances

Not relevant

3.2 Mixtures

Refer to section 16 for the full text of the hazard statements.

Index number	EC/List n°.	CAS	REACH	International Chemical Identification	X= Conc. %
- - -	297-629-8	93685-81-5	01-2120752626-49	Hydrocarbons, C4, 1,3-butadiene-free, polymd., triisobutylene fraction, hydrogenated	6.0 < x < 7.0

Hazard Class and Category Code(s), Hazard Statement Code(s)	Classification Supplementary Hazard Statement Code(s)	Pictograms, Signal Word Code(s)	Specific Concentration limits, M-Factors, Acute Toxicity Estimates (ATE)	Notes
Flam. Liq. 3 H226, Asp. Tox. 1 H304, Aquatic Chronic 4 H413	EUH066	GHS02; GHS08 – DANGER	- -	- -

Index number	EC/List n°.	CAS	REACH	International Chemical Identification	X= Conc. %
603-101-00-3	405-040-6	63500-71-0	01-0000015458-64	Tetrahydro-merhyl-methylpropyl)-pyran-4-ol	1.5 < x < 2.0

Hazard Class and Category Code(s), Hazard Statement Code(s)	Classification Supplementary Hazard Statement Code(s)	Pictograms, Signal Word Code(s)	Specific Concentration limits, M-Factors, Acute Toxicity Estimates (ATE)	Notes
Eye Irrit. 2 H319	- -	**GHS07 - WARNING**	- -	- -

Index number	EC/List n°.	CAS	REACH	International Chemical Identification	X= Conc. %
- - -	242-362-4	18479-58-8	01-2119457274-37	2,6-dimethyloct-7-en-2-ol / dihydromyrcenol	1.0 < x < 1.5

Hazard Class and Category Code(s), Hazard Statement Code(s)	Classification Supplementary Hazard Statement Code(s)	Pictograms, Signal Word Code(s)	Specific Concentration limits, M-Factors, Acute Toxicity Estimates (ATE)	Notes
Skin Irrit. 2 H315, Eye Irrit. 2 H319	- -	GHS07 - WARNING	- -	- -

Index number	EC/List n°.	CAS	REACH	International Chemical Identification	X= Conc. %
- - -	265-453-0	65113-99-7	- -	5-(2,2,3-Trimethyl-3-cyclopentenyl)-3-methylpentan-2-ol	1.0 < x < 1.5

Hazard Class and Category Code(s), Hazard Statement Code(s)	Classification Supplementary Hazard Statement Code(s)	Pictograms, Signal Word Code(s)	Specific Concentration limits, M-Factors, Acute Toxicity Estimates (ATE)	Notes
Eye Irrit. 2 H319, Aquatic Chronic 2 H411	- -	GHS07, GHS09 – WARNING	- -	- -

Index number	EC/List n°.	CAS	REACH	International Chemical Identification	X= Conc. %
- - -	201-828-7	88-41-5	- -	2-t-butylcyclohexyl acetate	1.0 < x < 1.5

Hazard Class and Category Code(s), Hazard Statement Code(s)	Classification Supplementary Hazard Statement Code(s)	Pictograms, Signal Word Code(s)	Specific Concentration limits, M-Factors, Acute Toxicity Estimates (ATE)	Notes
Aquatic Chronic 2 H411	- -	GHS09 - - -	- -	- -

Index number	EC/List n°.	CAS	REACH	International Chemical Identification	X= Conc. %
- -	203-305-9	105-53-3	01-2119886972-18	Diethyl malonate	1.0 < x < 1.5

Hazard Class and Category Code(s), Hazard Statement Code(s)	Classification Supplementary Hazard Statement Code(s)	Pictograms, Signal Word Code(s)	Specific Concentration limits, M-Factors, Acute Toxicity Estimates (ATE)	Notes
Skin Irrit. 2 H315, Eye Irrit. 2 H319, STOT SE 3 H335	- -	GHS07 - WARNING	- -	- -

Index number	EC/List n°.	CAS	REACH	International Chemical Identification	X= Conc. %
- -	203-375-0	106-22-9	01-2119453995-23	Hydroxyisoehxyl 3-cyclohexene carboxaldheyde	0.7 < x < 0.8

Hazard Class and Category Code(s), Hazard Statement Code(s)	Classification Supplementary Hazard Statement Code(s)	Pictograms, Signal Word Code(s)	Specific Concentration limits, M-Factors, Acute Toxicity Estimates (ATE)	Notes
Eye Irrit. 2 H319, Skin Irrit. 2 H315, Skin Sens. 1B H317	- -	- -	- -	- -

Index number	EC/List n°.	CAS	REACH	International Chemical Identification	X= Conc. %
- - -	204-116-4	115-95-7	01-2119454789-19	Linalyl acetate	0.7 < x < 0.8

Hazard Class and Category Code(s), Hazard Statement Code(s)	Classification Supplementary Hazard Statement Code(s)	Pictograms, Signal Word Code(s)	Specific Concentration limits, M-Factors, Acute Toxicity Estimates (ATE)	Notes
Skin Irrit. 2 H315, Skin Sens. 1B H317, Eye Irrit. 2 H319	- -	GHS07 - WARNING	- -	- -

Index number	EC/List n°.	CAS	REACH	International Chemical Identification	X= Conc. %
603-212-00-7	214-946-9	1222-05-5	01-2119488227-29	Hexamethylindanopyran	0.7 < x < 0.8

Hazard Class and Category Code(s), Hazard Statement Code(s)	Classification Supplementary Hazard Statement Code(s)	Pictograms, Signal Word Code(s)	Specific Concentration limits, M-Factors, Acute Toxicity Estimates (ATE)	Notes
Aquatic Chronic 1, H410	- -	**GHS09 - WARNING**	**M=1**	- -

Index number	EC/List n°.	CAS	REACH	International Chemical Identification	X= Conc. %
603-235-00-2	201-134-4	78-70-6	01-2119474016-42	Linalool; 3,7-dimethyl-1,6-octadien-3-ol; dl-linalool	0.7 < x < 0.8

Hazard Class and Category Code(s), Hazard Statement Code(s)	Classification Supplementary Hazard Statement Code(s)	Pictograms, Signal Word Code(s)	Specific Concentration limits, M-Factors, Acute Toxicity Estimates (ATE)	Notes
Skin Irrit. 2 H315, **Skin Sens. 1B H317**, Eye Irrit. 2 H319	- -	**GHS07 - WARNING**	- -	- -

Index number	EC/List n°.	CAS	REACH	International Chemical Identification	X= Conc. %
- - -	204-642-4	123-68-2	01-2119983573-26	Allyl caproate / Allyl hexanoate	0.45 < x < 0.50

Hazard Class and Category Code(s), Hazard Statement Code(s)	Classification Supplementary Hazard Statement Code(s)	Pictograms, Signal Word Code(s)	Specific Concentration limits, M-Factors, Acute Toxicity Estimates (ATE)	Notes
Acute Tox. 3 H301, Acute Tox. 3 H311, Acute Tox. 3 H331, Aquatic Acute 1 H400, Aquatic Chronic 3 H412	- -	GHS06 – GHS09 - DANGER	M=1	- -

Index number	EC/List n°.	CAS	REACH	International Chemical Identification	X= Conc. %
601-029-00-7	227-813-5	5989-27-5	01-2119529223-47	d-limonene / (R)-p-mentha-1,8-diene	0.45 < x < 0.50

Hazard Class and Category Code(s), Hazard Statement Code(s)	Classification Supplementary Hazard Statement Code(s)	Pictograms, Signal Word Code(s)	Specific Concentration limits, M-Factors, Acute Toxicity Estimates (ATE)	Notes
Flam. Liq. 3 H226, Skin Irrit. 2 H315, Skin Sens. 1 H317, Aquatic Acute 1 H400, Aquatic Chronic 1 H410	- -	**GHS02, GHS07, GHS09 - WARNING**	**M=1**	**C**

Index number	EC/List n°.	CAS	REACH	International Chemical Identification	X= Conc. %
- -	943-552-6	91844-92-7	01-2120119366-58	Lemongrass oil	0.10 < x < 0.15

Hazard Class and Category Code(s), Hazard Statement Code(s)	Classification Supplementary Hazard Statement Code(s)	Pictograms, Signal Word Code(s)	Specific Concentration limits, M-Factors, Acute Toxicity Estimates (ATE)	Notes
Asp. Tox. 1 H304, Eye Dam. 1 H318, Skin Irrit. 2 H315, Skin Sens. 1B H317, Aquatic Chronic 2 H411	- -	- -	- -	- -

Index number	EC/List n°.	CAS	REACH	International Chemical Identification	X= Conc. %
- - -	204-872-5	127-91-3	- -	Beta-pinenes	0.10 < x < 0.15

Hazard Class and Category Code(s), Hazard Statement Code(s)	Classification Supplementary Hazard Statement Code(s)	Pictograms, Signal Word Code(s)	Specific Concentration limits, M-Factors, Acute Toxicity Estimates (ATE)	Notes
Flam. Liq. 3 H226, Asp. Tox. 1 H304, Skin Irrit. 2 H315, Skin Sens. 1 H317, Aquatic Acute 1 H400, Aquatic Chronic 1 H410	- -	GHS02, GHS07, GHS07, GHS09, DANGER	Acute M=1; Chronic M=1	- -

Index number	EC/List n°.	CAS	REACH	International Chemical Identification	X= Conc. %
- - -	220-292-5	2705-87-5	1-2119976355-27	Allyl 3-cyclohexylpropionate	0.10 < x < 0.15

Hazard Class and Category Code(s), Hazard Statement Code(s)	Classification Supplementary Hazard Statement Code(s)	Pictograms, Signal Word Code(s)	Specific Concentration limits, M-Factors, Acute Toxicity Estimates (ATE)	Notes
Acute Tox. 4 H302, Acute Tox. 4 H312, Acute Tox. 4 H332, Skin Sens. 1B H317, Aquatic Acute 1 H400, Aquatic Chronic 1 H410	- -	GHS07 - WARNING	M=1 STA Orale: 500 mg/kg STA Cutanea: 1100 mg/kg STA Inalazione nebbie/polveri: 1,5 mg/l	- -

SECTION 4: First aid measures

4.1 Description of first aid measures

First aid instructions categorized according to relevant routes of exposure. It is advisable for those who provide first aid to wear the personal protective equipment deemed suitable for the conditions in which the intervention is to be carried out.

Inhalation

Given the specificity of the product and the small quantities of substances released, conditions such as to require first aid measures are not foreseen.

Skin

Wash the areas of the body that have come into contact with the product with plenty of soap and water, even if they are only suspected.

Eyes

Given the particular structure of the product, accidental contacts are unpredictable and mainly of traumatic and/or voluntary origin. If necessary, apply fresh compresses and, if the painful phenomena continue, contact the medical staff.

Ingestion

SEEK MEDICAL ATTENTION IMMEDIATELY.

4.2 Most important symptoms and effects, both acute and delayed

Inhalation

They are not known and there are no specific reports on symptoms and effects caused by the product.

Skin

They are not known and there are no specific reports on symptoms and effects caused by the product.

Eyes

Redness.

Ingestion

They are not known and there are no specific reports on symptoms and effects caused by the product.

4.3 Indication of any immediate medical attention and special treatment needed

See section 4.1 Description of first aid measures.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Water spray, CO_2, alcohol resistant foam, chemical powders depending on the materials involved in the fire.
Unsuitable extinguishing media : None in particular

5.2 Special hazards arising from the substance or mixture

During combustion, fumes that are potentially harmful to health may develop. If exposed to flame, it catches fire and continues to burn with a dimly lit flame even if removed from the heat source.

5.3 Advice for firefighters

Use protective clothing for the respiratory tract, eyes and skin. Water spray can be used to disperse vapors and protect people engaged in firefighting. It is also advisable to use self-contained breathing apparatus, especially if you work in closed and poorly ventilated places. Wear the specific protective equipment of the firefighting team. Given the polymeric characteristic of the material, the possible presence of considerable quantities of product in the environments involved in the fire can be a source of risk in causing the re-ignition of the fire in the presence of oxygen since the internal layers can conserve heat. It is therefore necessary, in the event of a fire in environments where large quantities of product have been involved, to dissipate the heat retained inside.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : Move away from the area surrounding the spill or release. Not smoking.
For emergency responders : General information: No smoking. Use suitable personal protective equipment, see Section 8.

6.2 Environmental precautions

Contain leaks with inert material. Avoid dispersion and/or washout in sewers and surface waters. Dispose of the residue according to current regulations.

6.3 Methods and material for containment and cleaning up

6.3.1 Appropriate advice shall be provided on how to contain a spill

Keep dry.

6.3.2 Appropriate advice shall be provided on how to clean-up a spill

After collection, wash the affected area and materials with plenty of water and recover the resulting fluids.

6.3.3 Any other information shall be provided relating to spills and releases, including advice on inappropriate containment or clean-up techniques

Hand over waste only to specialized companies

6.4 Reference to other sections

Refer to sections 8 and 13 for more information

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Normal precautions for handling sensitizing chemical products, protecting themselves from any accidental contact. Do not smoke, eat or drink while handling.

7.2 Conditions for safe storage, including any incompatibilities

How to manage risks associated with:

i)	explosive atmospheres	Nothing to report
ii)	corrosive conditions	Nothing to report
iii)	flammability hazards	Nothing to report

iv)	incompatible substances or mixtures	Avoid contact with solvents which could damage the product.
v)	evaporative conditions	Keep in the original packaging, in well-ventilated areas at room temperature.
vi)	potential ignition sources (including electrical equipment)	Keep away from open flames, sparks and sources of ignition in general. Appropriate maintenance of all the electrical components of machines, systems and electrical installations in general can give a sufficient guarantee of reducing the risk of fire.

How to control the effects of:

i)	weather conditions	Store indoors in dry environments.
ii)	ambient pressure	Nothing to report
iii)	Temperature	Store at room temperature
iv)	sunlight	Do not store in direct sunlight.
v)	humidity	Keep away from humidity.
vi)	Vibration	Nothing to report

How to maintain the integrity of the substance or mixture by the use of:

i)	stabilisers	Nothing to report
ii)	antioxidants	Nothing to report

Other advice including

i)	ventilation requirements	Keep in cool and ventilated places.
ii)	specific designs for storage rooms or vessels (including retention walls and ventilation)	Nothing to report
iii)	quantity limits under storage conditions (if relevant)	Keep in cool and ventilated places.
iv)	packaging compatibilities	Nothing to report
v)	Storage class	Not applicable

7.3 Specific end use(s)

Consumer: Follow the instructions given on the label/box/information leaflets.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Related to the substances contained

Substance:	Hydrocarbons, C4, 1,3-butadiene-free, polymd., triisobutylene fraction, hydrogenated
CAS:	93685-81-5

GESTIS International Limit Values

	Limit value – Eight hours		Limit value – Short term	
	ppm	mg/m³	ppm	mg/m³
	- -	- -	- -	- -
	Remarks			
	- -			

Link DNEL value: https://echa.europa.eu/it/registration-dossier/-/registered-dossier/13879

	DNEL (Workers)					DNEL (Population)			
	Systemic		Local			Systemic		Local	
	Long term	Short term	Long term	Short term		Long term	Short term	Long term	Short term
Inhalation	No hazard identified		No hazard identified		Inhalation	No hazard identified		No hazard identified	
Dermal	No hazard identified		No hazard identified		Dermal	No hazard identified		No hazard identified	
Oral	Not available		Not available		Oral	No hazard identified		Not available	
Eyes	Not available		No hazard identified		Eyes	Not available		No hazard identified	

PNEC

Freshwater	No data available: testing technically not feasible	Intermittent	Not available	Marine water	No data available: testing technically not feasible
STP	No data available: testing technically not feasible	Sediment (freshwater)	No data available: testing technically not feasible	Sediment (marine water)	No data available: testing technically not feasible
Air	No hazard identified	Soil	No data available: testing technically not feasible	Hazard for predators	No data available: testing technically not feasible

Substance:	Tetrahydro-merhyl-methylpropyl)-pyran-4-ol
CAS:	63500-71-0

GESTIS International Limit Values

	Limit value - Eight hours		Limit value - Short term	
	ppm	mg/m³	ppm	mg/m³
	- -	- -	- -	- -
	Remarks			
	- -			

https://echa.europa.eu/it/registration-dossier/-/registered-dossier/14480

	DNEL (Workers)					DNEL (Population)			
	Systemic		Local			Systemic		Local	
	Long term	Short term	Long term	Short term		Long term	Short term	Long term	Short term
Inhalation	44.1 mg/L	No hazard identified	No hazard identified		Inhalation	13 mg/L	No hazard identified	No hazard identified	
Dermal	41.7 mg/kg bw/day	No hazard identified	No hazard identified		Dermal	25 mg/kg bw/day	No hazard identified	No hazard identified	
Oral	Not available		Not available		Oral	7.5 mg/kg bw/day	No hazard identified	Not available	
Eyes	Not available		Medium hazard (no threshold derived)		Eyes	Not available		No hazard identified	

PNEC

Freshwater	0.094 mg/L	Intermittent	0.94 mg/L	Marine water	0.009 mg/L
STP	10 mg/L	Sediment (freshwater)	0.412 mg/kg/sediment	Sediment (marine water)	0.041 mg/kg/sediment
Air	No hazard identified	Soil	0.09 mg/kg soil	Hazard for predators	No potential to cause toxic effects if accumulated (in higher organisms) via the food chain

Substance:	2,6-dimethyloct-7-en-2-ol / dihydromyrcenol
CAS:	18479-58-8

GESTIS International Limit Values

	Limit value - Eight hours	Limit value - Short term

	ppm	mg/m³	ppm	mg/m³
	- -	- -	- -	- -

Remarks
- -

https://echa.europa.eu/it/registration-dossier/-/registered-dossier/15832

	DNEL (Workers)					DNEL (Population)			
	Systemic		Local			Systemic		Local	
	Long term	Short term	Long term	Short term		Long term	Short term	Long term	Short term
Inhalation	73.5 mg/m³	No hazard identified	No hazard identified		Inhalation	21.7 mg/m³	No hazard identified	No hazard identified	
Dermal	20.8 mg/kg bw/day	No hazard identified	No hazard identified		Dermal	12.5 mg/kg bw/day	No hazard identified	No hazard identified	
Oral	Not available		Not available		Oral	12.5 mg/kg bw/day	No hazard identified	Not available	
Eyes	Not available		No hazard identified		Eyes	Not available		No hazard identified	

PNEC

Freshwater	27.8 µg/L	Intermittent	0.278 µg/L	Marine water	2.78 µg/L
STP	10 mg/L	Sediment (freshwater)	0.594 mg/kg sediment dw	Sediment (marine water)	0.059 mg/kg sediment dw
Air	No hazard identified	Soil	0.103 mg/kg soil dw	Hazard for predators	111 mg/kg food

Substance: Diethyl malonate
CAS: 105-53-3

GESTIS International Limit Values

	Limit value - Eight hours		Limit value - Short term	
	ppm	mg/m³	ppm	mg/m³
	- -	- -	- -	- -

Remarks
- -

Link DNEL value https://echa.europa.eu/it/registration-dossier/-/registered-dossier/5774

	DNEL (Workers)					DNEL (Population)			
	Systemic		Local			Systemic		Local	
	Long term	Short term	Long term	Short term		Long term	Short term	Long term	Short term
Inhalation	8.468 mg/m³	Low hazard (no threshold derived)	Low hazard (no threshold derived)		Inhalation	2.106 mg/m³	Low hazard (no threshold derived)	Low hazard (no threshold derived)	
Dermal	1.213 mg/kg bw/day	Low hazard (no threshold derived)	Low hazard (no threshold derived)		Dermal	0.607 mg/kg bw/day	Low hazard (no threshold derived)	Low hazard (no threshold derived)	
Oral	Not available		Not available		Oral	Low hazard (no threshold derived)		Not available	
Eyes	Not available		Medium hazard (no threshold derived)		Eyes	Not available		Medium hazard (no threshold derived)	

PNEC

Freshwater	11.8 µg/L	Intermittent	Not available	Marine water	1.18 µg/L
STP	0.108 mg/L	Sediment (freshwater)	4.62 mg/kg sediment dw	Sediment (marine water)	0.924 mg/kg sediment dw
Air	No hazard identified	Soil	8.557 µg/kg soil dw	Hazard for predators	No potential for bioaccumulation

Substance: Linalyl acetate
CAS: 115-95-7

GESTIS International Limit Values

	Limit value - Eight hours		Limit value - Short term	
	ppm	mg/m³	ppm	mg/m³
	- -	- -	- -	- -

Remarks
- -

https://echa.europa.eu/it/registration-dossier/-/registered-dossier/14484

	DNEL (Workers)					DNEL (Population)			
	Systemic		Local			Systemic		Local	
	Long term	Short term	Long term	Short term		Long term	Short term	Long term	Short term
Inhalation	2.75 mg/m³	No hazard identified	No hazard identified		Inhalation	0.68 mg/m³	No hazard identified	No hazard identified	
Dermal	2.5 mg/kg bw/day	No hazard identified	236.2 µg/cm²		Dermal	1.25 mg/kg bw/day	No hazard identified	236.2 µg/cm²	
Oral	Not available		Not available		Oral	0.2 mg/kg bw/day	No hazard identified	Not available	
Eyes	Not available		Low hazard (no threshold derived)		Eyes	Not available		Low hazard (no threshold derived)	

PNEC

Freshwater	0.011 mg/L	Intermittent	0.11 mg/L	Marine water	0.001 mg/L
STP	10 mg/L	Sediment (freshwater)	0.609 mg/kg sediment dw	Sediment (marine water)	0.061 mg/kg sediment dw
Air	No hazard identified	Soil	0.115 mg/kg soil dw	Hazard for predators	No potential for bioaccumulation

Substance: Hexamethylindanopyran
CAS: 1222-05-5

GESTIS International Limit Values

	Limit value - Eight hours		Limit value - Short term	
	ppm	mg/m³	ppm	mg/m³
	- -	- -	- -	- -

Remarks
- -

https://echa.europa.eu/it/registration-dossier/-/registered-dossier/14504

	DNEL (Workers)					DNEL (Population)			
	Systemic		Local			Systemic		Local	
	Long term	Short term	Long term	Short term		Long term	Short term	Long term	Short term
Inhalation	13.5 mg/L	No hazard identified	No hazard identified		Inhalation	4 mg/L	No hazard identified	No hazard identified	
Dermal	36.7 mg/kg bw/day	No hazard identified	No hazard identified		Dermal	22 mg/kg bw/day	No hazard identified	No hazard identified	
Oral	Not available		Not available		Oral	2.3 mg/kg bw/day	No hazard identified	Not available	
Eyes	Not available		No hazard identified		Eyes	Not available		No hazard identified	

PNEC

Freshwater	6.8 µg/L	Intermittent	Not available	Marine water	0.44 µg/L
STP	1 mg/L	Sediment (freshwater)	2 mg/kg/sediment	Sediment (marine water)	0.394 mg/kg/sediment

Air	No hazard identified	Soil	1.5 mg/kg soil	Hazard for predators	20.4 g/kg food

Substance:	Linalool
CAS:	78-70-6

GESTIS International Limit Values

	Limit value - Eight hours		Limit value - Short term	
	ppm	mg/m³	ppm	mg/m³
	- -	- -	- -	- -

	Remarks
	- -

https://echa.europa.eu/it/registration-dossier/-/registered-dossier/14501

	DNEL (Workers)					DNEL (Population)			
	Systemic		Local			Systemic		Local	
	Long term	Short term	Long term	Short term		Long term	Short term	Long term	Short term
Inhalation	24.58 mg/m³	No hazard identified	Low hazard (no threshold derived)		Inhalation	4.33 mg/m³	No hazard identified	Low hazard (no threshold derived)	
Dermal	3.5 mg/kg bw/day	No hazard identified	3 mg/cm²		Dermal	1.25 mg/kg bw/day	No hazard identified	1.5 mg/cm²	
Oral	Not available		Not available		Oral	2.49 mg/kg bw/day	No hazard identified	Not available	
Eyes	Not available		Low hazard (no threshold derived)		Eyes	Not available		Low hazard (no threshold derived)	

PNEC

Freshwater	0.2 mg/L	Intermittent	2 mg/L	Marine water	0.02 mg/L
STP	10 mg/L	Sediment (freshwater)	2.22 mg/kg sediment dw	Sediment (marine water)	0.222 mg/kg sediment dw
Air	Not available	Soil	0.327 mg/kg soil dw	Hazard for predators	7.8 mg/kg food

Substance:	Allyl caproate / Allyl hexanoate
CAS:	123-68-2

GESTIS International Limit Values

	Limit value - Eight hours		**Limit value - Short term**	
	ppm	**mg/m³**	**ppm**	**mg/m³**
	- -	- -	- -	- -

	Remarks
	- -

Link DNEL value	https://echa.europa.eu/it/registration-dossier/-/registered-dossier/12389

	DNEL (Workers)					**DNEL (Population)**			
	Systemic		**Local**			**Systemic**		**Local**	
	Long term	**Short term**	**Long term**	**Short term**		**Long term**	**Short term**	**Long term**	**Short term**
Inhalation	15 mg/m³	Low hazard (no threshold derived)	No hazard identified		**Inhalation**	3.7 mg/m³	Medium hazard (no threshold derived)	No hazard identified	
Dermal	4.3 mg/kg bw/day	Medium hazard (no threshold derived)	No hazard identified		**Dermal**	2.1 mg/kg bw/day	Medium hazard (no threshold derived)	No hazard identified	
Oral	Not available		Not available		**Oral**	2.1 mg/kg bw/day	Medium hazard (no threshold derived)	Not available	
Eyes	Not available		No hazard identified		**Eyes**	Not available		No hazard identified	

PNEC

Freshwater	0.117 µg/L	**Intermittent**	1.17 µg/L	**Marine water**	0.012 µg/L
STP	10 mg/L	**Sediment (freshwater)**	4.46 µg/kg sediment dw	**Sediment (marine water)**	0.446 µg/kg sediment dw
Air	No hazard identified	**Soil**	0.825 µg/kg soil dw	**Hazard for predators**	47.56 mg/kg food

Substance:	d-Limonene
CAS:	5989-27-5

GESTIS International Limit Values

	Limit value - Eight hours		Limit value - Short term	
	ppm	mg/m³	ppm	mg/m³
Finland	25	140	50 (1)	280 (1)
Germany (AGS)	5	28	20 (1)	110 (1)
Germany (DFG)	5	28	20 (1)	112 (1)
Switzerland	7	40	14 (1)	80 (1)

	Remarks
Finland	(1) 15 minutes average value
Germany (AGS)	(1) 15 minutes reference period
Germany (DFG)	(1) 15 minutes average value
Switzerland	(1) 15 minutes average value

https://echa.europa.eu/it/registration-dossier/-/registered-dossier/15256

	DNEL (Workers)					DNEL (Population)			
	Systemic		Local			Systemic		Local	
	Long term	Short term	Long term	Short term		Long term	Short term	Long term	Short term
Inhalation	66.7 mg/m³	No hazard identified	No hazard identified		Inhalation	16.6 mg/m³	No hazard identified	No hazard identified	
Dermal	9.5 mg/kg bw/day	No hazard identified	Medium hazard (no threshold derived)		Dermal	4.8 mg/kg bw/day	No hazard identified	No hazard identified	
Oral	Not available		Not available		Oral	Not available	4.8 mg/kg bw/day	No hazard identified	
Eyes	Not available		No hazard identified		Eyes	Not available		Not available	

PNEC

Freshwater	14 µg/L	Intermittent	Not available	Marine water	1.4 µg/L
STP	1,8 mg/L	Sediment (freshwater)	3.85 mg/kg sediment dw	Sediment (marine water)	0.385 mg/kg sediment dw
Air	No hazard identified	Soil	0.763 mg/kg soil dw	Hazard for predators	133 mg/kg food

Substance:	Beta-pinenes
CAS:	127-91-3

GESTIS International Limit Values

	Limit value – Eight hours		Limit value – Short term	
	ppm	mg/m³	ppm	mg/m³
Belgium	20	- -	- -	- -
Canada - Ontario	20	- -	- -	- -
Denmark	25	140	50	280

Sweden	25	150	50 (1)	300 (1)
Switzerland	20	112	40 (1)	224 (1)

	Remarks
Sweden	(1) 15 minutes average value
Switzerland	(1) 15 minutes average value

Link DNEL value: - -

	DNEL (Workers)				DNEL (Population)				
	Systemic		Local			Systemic		Local	
	Long term	Short term	Long term	Short term		Long term	Short term	Long term	Short term
Inhalation	5.69 mg/m³	No hazard identified	Hazard unknown (no further information necessary)		Inhalation	1 mg/m³	No hazard identified	Hazard unknown (no further information necessary)	
Dermal	0.8 mg/kg bw/day	No hazard identified	54 µg/cm²	No DNEL required: short term exposure controlled by conditions for long-term	Dermal	0.3 mg/kg bw/day	No hazard identified	27 µg/cm²	No DNEL required: short term exposure controlled by conditions for long-term
Oral	Not available		Not available		Oral	0.3 mg/kg bw/day	No hazard identified	Not available	
Eyes	Not available		No hazard identified		Eyes	Not available		No hazard identified	

PNEC

Freshwater	1.004 µg/L	Intermittent	5.002 µg/L	Marine water	0.1 µg/L
STP	3.26 mg/L	Sediment (freshwater)	0.337 mg/kg sediment dw	Sediment (marine water)	0.034 mg/kg sediment dw
Air	No hazard identified	Soil	0.067 mg/kg soil dw	Hazard for predators	13.1 mg/kg food

Substance: Allyl 3-cyclohexylpropionate
CAS: 2705-87-5

GESTIS International Limit Values

	Limit value - Eight hours		Limit value - Short term	
	ppm	mg/m³	ppm	mg/m³
	- -	- -	- -	- -

Remarks
- -

Link DNEL value: https://echa.europa.eu/it/registration-dossier/-/registered-dossier/12564

	DNEL (Workers)				DNEL (Population)				
	Systemic		Local			Systemic		Local	
	Long term	Short term	Long term	Short term		Long term	Short term	Long term	Short term
Inhalation	15 mg/m³	Low hazard (no threshold derived)	Medium hazard (no threshold derived)	No hazard identified	Inhalation	3.7 mg/m³	Low hazard (no threshold derived)	No hazard identified	
Dermal	4.3 mg/kg bw/day	Low hazard (no threshold derived)	Medium hazard (no threshold derived)	No hazard identified	Dermal	2.1 mg/kg bw/day	Low hazard (no threshold derived)	No hazard identified	
Oral	Not available		Not available		Oral	2.1 mg/kg bw/day	Low hazard (no threshold derived)	Not available	
Eyes	Not available		No hazard identified		Eyes	Not available		No hazard identified	

PNEC

Freshwater	0.13 µg/L	Intermittent	1.3 µg/L	Marine water	0.013 µg/L
STP	0.2 mg/L	Sediment (freshwater)	24.13 µg/kg sediment dw	Sediment (marine water)	2.413 µg/kg sediment dw
Air	No hazard identified	Soil	4.75 µg/kg soil dw	Hazard for predators	143 mg/kg food

8.2 Exposure controls

8.2.1 Appropriate engineering controls

If, following the risk assessment and the adoption of preventive technical and/or organizational collective protection measures, it appears that there is still a residual risk for the worker, it is necessary to equip the worker with Personal Protective Equipment. In any company, however, the instructions given by the Head of the Prevention and Protection Service must be complied with, who will have assessed the risk deriving from all the products used in each working phase. Before choosing the PPE to wear, it is essential to know the risks associated with the work environment, the environmental conditions, the job of the wearer and after having consulted the instructions provided by the manufacturer. All PPE belonging to the third category must be delivered to operators only after adequate training.

The use of this mixture does not imply the application of Directive 2004/37 / EC on the protection of workers against the risks deriving from exposure to carcinogens or mutagens at work.

Descriptor for Process categories: PROC19 - Manual activities involving hand contact

8.2.2 Individual protection measures, such as personal protective equipment

The information below must be considered only as an aid to the Head of the Prevention and Protection Service as in addition to this mixture he will have to implement the choices on PPE also in consideration of the other chemical products present in the company used in each specific working phase.

a) EYE/FACE PROTECTION

PITTOGRAM	PPE	METHOD OF CHOOSING THE PPE				
		RISK CHARACTERISTICS	PROTECTION			
			Eyeglasses	**Glasses with side shields**	**Mask glasses**	**Face shield**
 Eye and face protection devices	PPE for the eyes are second category and must be provided with indelible CE marking and the number of the Notified Body that issued the certification. Their use is foreseen in all places where there is a risk of projections of solid bodies, liquids or optical radiation. For eyeglass wearers, it is possible to use over glasses if the duration of use is limited or to mount graduated lenses on safety frames. Operators wearing contact lenses must make their condition known in order to make it easier, if necessary, to remove them by first aid workers in case of need in an emergency. Standard EN166 Personal eye protection - Specifications	**Frontal sketches**	Good	Good	Excellent	Excellent
		Side sketches	Scarso	Good	Excellent	Good / Excellent
		Frontal splinters	Excellent	Good	Excellent	Excellent if of adequate thickness
		Side impacts	Scant	Fairly good	Excellent	It depends on the length
		Neck and face protection	Scant	Scant	Scant	Fairly good
		Wearability	Good / Very good	Good	Fairly good	Good (for short periods)
		Continuous use	Very good	Very good	Fairly good	Fairly good
		Acceptability for use	Very good	Good	Scant	Fairly good

The Head of the Prevention and Protection Service will assess the need to provide eyewash devices near the areas where the mixture is used.

IN NORMAL USE THERE ARE NO PERSONAL PROTECTIVE EQUIPMENT PROVIDED

b) SKIN PROTECTION

i) Hand protection

PITTOGRAM	PPE	METHOD OF CHOOSING THE PPE

Gloves

The choice of gloves depends on the worker's job, the characteristics of the glove and its biocompatibility. The "grip" must always be guaranteed. The general requirements for choosing the most suitable PPE are: harmlessness, ergonomics / comfort, dexterity, transmission and absorption of water vapor and cleaning. Regarding these requirements, the reference technical standard is UNI EN 420 - Protective gloves. General requirements and test methods. Gloves that protect against chemicals are regulated by EN374 - Protective gloves against chemicals and microorganisms. The basic requirements for this type of gloves are: penetration and permeation. Chemical protective gloves are divided into three categories: Type A, B and C; the belonging to which depends on the number of chemicals tested, from a list of 18 substances that have reached a defined permeation time. Gloves must be checked before use. The choice of gloves based on resistance must be made following the UNI EN 16523 standard - Determination of the resistance of materials to the permeation of chemical products. Use proper technique to remove gloves avoiding skin contact with the contaminated outer surface of the glove.
After use, wash and dry your hands.

CHEMICAL PROTECTION

Type	Level	Time	Substances
A	2	30 minutes	minimum 6
B	2	30 minutes	minimum 3
C	1	10 minutes	minimum 1

MATERIALS FOR PROTECTION FROM CHEMICAL AGENTS

	LATEX	NEOPRENE	NITRILE	PVC
Highlights	Excellent flexibility and tear resistance	Polyvalent chemical resistance: acids, aliphatic solvents. Good resistance to sunlight and ozone.	Excellent resistance to abrasion and perforation. Excellent resistance to hydrocarbon derivatives	Good resistance to acids and bases
Precautions	It can cause allergic reactions. Avoid contact with fatty oils and hydrocarbon derivatives.	Avoid contact with fatty oils and hydrocarbon derivatives	Avoid contact with solvents containing ketones and oxidizing acids, organic nitrogen products.	Weak mechanical resistance. Avoid contact with solvents containing ketones and aromatic solvents

The Head of the Prevention and Protection Service will evaluate the choice of PPE to be used based on the duties.

USE WATERPROOF GLOVES

ii) other

PITTOGRAM	PPE	METHOD OF CHOOSING THE PPE

Work clothing

PPE for the body can be of different categories depending on their specific use. Under normal working conditions, normal work clothing offers characteristics that provide sufficient protection for workers. In activities presenting particular risks, specific "protective clothing" should be used which covers or replaces personal clothing and which is designed with specific protective characteristics. The basic requirements relating to the ergonomics and health of PPE for the body are: harmlessness of the materials, comfort and effectiveness factors, design, thermal resistance of the clothing and the characteristics of the operators. Please note that to ensure adequacy and mobility with full-coverage protective clothing, it is recommended that all operators carry out the "seven movements" test. Standard EN 13688 Protective clothing - General requirements

DANGER	Full coverage garment		Partial coverage garment	
	Waterproof	Permeable to air	Waterproof	Permeable to air
Gas and fumes	A	NO	NO	NO
Jets of liquids	A	NO	P	NO
Splashes and splashes	A	P	P	P
Dust	A	A	P	P
Dirt	A	A	A	A

NO: Indicates that the possibility is not compatible - A: suitable combination - P: combination that depends on external conditions

The protective clothing against chemicals, depending on the barrier performance of the raw material used and the packaging of the garment, have different types of protection: Type 1 (gas-tight), Type 2 (non-watertight gas), Type 3 (liquid tight), Type 4 (splash tight), Type 5 (dust tight), Type 6 (limited liquid splash tight). The chemical risks are many and it is therefore necessary to choose the most appropriate garment, also considering that the materials can be both waterproof and permeable, evaluating the combination between the type of protection offered by the the construction techniques and the design adopted for the realization of the garment. itself and the performance class from the raw material.

If the Head of the Prevention and Protection Service deems it necessary, protective clothing can be worn in combination with an appropriate respiratory protection device and with boots, gloves or other means of protection.

NO PERSONAL PROTECTIVE EQUIPMENT IS REQUIRED IN NORMAL USE

c) RESPIRATORY PROTECTION

PITTOGRAM	PPE	METHOD OF CHOOSING THE PPE

RPD (Respiratory protective devices)

PPE for respiratory protection are of the third category and must be provided with CE marking, the number of the Notified Body that issued the certification and must be provided only after information, training and specific training on their use. To define the type of RPD to use, pay attention to the oxygen rate present in the workplace, using the O_2 concentration of 17% as a limit. Carefully define the type of contaminant (Gas, steam / Dust, particles, viruses), its detection threshold and its use or not in a confined space.
The UNI EN 529 standard (Respiratory protection devices - Recommendations for selection, use, care and maintenance - Guidance document) establishing the appropriate FPO value "operational protection factor" (eg use of face masks as per standard UNI EN149 - Respiratory protective devices - Filtering half mask against particles) can be a valid aid in determining the most correct PPE.

DUST FILTERS

Efficiency	Dust class	RPD class and marking	Minimum total filtering efficiency	Protection
LOW	Filters P1	Respirators FFP1	78%	Powders/Harmful aerosol
AVERAGE	Filters P2	Respirators FFP2	92%	Powders/fumes/ low toxicity aerosol
HIGH	Filters P3	Respirators FFP3	98%	Powders/fumes / Harmful aerosol

GAS FILTERS

Capacity	Class	Maximum concentration
Low	1	Gas / vapor concentrations up to 1000 ppm
Average	2	Gas / vapor concentrations up to 5000 ppm
High	3	Gas / vapor concentrations up to 10000 ppm

TYPE OF FILTERS

Type	Protection	Filter color
A	Organic gases and vapors with a boiling point> 65 ° C	BROWN
B	Inorganic gases and vapors	GREY
E	Acid gases	YELLOW
K	Ammonia and derivatives	GREEN
P	Toxic dusts, fumes, mists	WHITE
AX (EN371)	Low boiling point organic gases and vapors <65 ° C	BROWN

FACTORS TO CONSIDER	REASON
Type of substance	Correct choice of filter type
	Need / opportunity to protect other parts of the face (eyes - face)
Concentrations	Filter capacity in relation to exposure time
Visibility	Reduction of protection

DUST FILTER RESPIRATORS

Filter respirator	Nominal Protection Factor	Operational Protection Factor
Facial Filter FFP1 Half mask + P1	4	4
Facial Filter FFP2 Half mask + P2	12	10
Facial Filter FFP3 Half mask + P3	50	30

Freedom of movement	Reduction of weight and discomfort	Full face + P1	5	4
Facial anatomy	Mask adequacy	Full face + P2	20	15
Environmental conditions		Full face + P3	1000	400

The Head of the Prevention and Protection Service, as well as correctly defining the specific PPE for the activities, must pay attention to follow the instructions provided by the manufacturers of the various PPE.

NO PERSONAL PROTECTIVE EQUIPMENT IS REQUIRED IN NORMAL USE

d) THERMAL HAZARDS

PITTOGRAM	PPE	OBSERVATIONS
 Hot/Cold	The indications provided in this section define the PPE intended to protect against possible temperature variations that the mixture causes or that the mixture itself may undergo during normal working activities. PPE must protect against excesses in external temperature by maintaining body temperature, thermally insulate while maintaining permeability to water and air to ensure sweating and moisture removal, respectively, so as not to cause heat loss. In order to protect themselves from the cold, PPE must retain a degree of flexibility that allows the operator to perform the necessary actions and to assume certain positions. PPE intended for short-term interventions or likely to receive projections of hot products, must have a calorific capacity sufficient to return most of the stored heat only after the user has removed them.	PPE intended to protect against thermal differences must have an adequate heat flow transmission coefficient to avoid any risk of damage as required by the foreseeable conditions of use. The heat flow transmitted to the operator during the use of PPE must be such that its accumulation does not in any case reach the pain threshold or the one in which any harmful effect on health occurs. PPE must prevent, as far as possible, the penetration of liquids and must not cause injury caused by contact between their protective coating and the operator.

The choice of this type of PPE must be made by guaranteeing thermal insulation power and mechanical and chemical resistance adequate to the foreseeable conditions of use that the Head of the Prevention and Protection Service deems necessary.

THE MIXTURE IS NOT EXPECTED TO CAUSE OR UNDERTAKE SUGNIFICANT TEMPERATURE CHANGES DURING THE INTENDED USE.

8.2.3 Environmental exposure controls

Prevent uncontrolled release into the environment.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

The physical and chemical properties listed below are not to be considered technical specifications. The reference specifications are shown in the technical documentation.

	Physical and chemical properties	Value	Notes or analytical method
a)	Physical state	Solid	As defined in Annex I, section 1.0 of Reg. 1272/2008
b)	Colour	Various colours	- -
c)	Odour	Characteristic of the fragrance	- -
d)	Melting point/freezing point	Not determined	- -
e)	Boiling point or initial boiling point and boiling range	Not determined	- -
f)	Flammability	NO	Applicable to gases, liquids and solids
g)	Lower and upper explosion limit	Not applicable	Not applicable to solids
h)	Flash point	Not applicable	Does not apply to gases, aerosols and solids
i)	Auto-ignition temperature	Not applicable	Only applicable to gases and liquids
j)	Decomposition temperature	Not applicable	Only applicable to self-reactive substances and mixtures, organic peroxides and other substances and mixtures which may decompose.
k)	pH	Not applicable	The mixture is not soluble in water
l)	Kinematic viscosity	Not applicable	Applies to liquids only
m)	Solubility	Insoluble in water, partially soluble in alcohol	- -
n)	Partition coefficient n-octanol/water (log value)	Not applicable	It does not apply to inorganic and ionic liquids and, as a rule, does not apply to mixtures
o)	Vapour pressure	Not determined	According to the REACH regulation, the study must not be conducted if the melting point is above 300°C (Annex VII, column 2 adaptation).
p)	Density and/or relative density	Not applicable	only applies to liquids and solids.
q)	Relative vapour density	Not applicable	only applies to gases and liquids.
r)	Particle characteristics	Not relevant. Non-particulate blend	applies only to solids

9.2 Other information

a)	Explosives:	Not applicable
b)	Flammable gases:	Not applicable
c)	Aerosols:	Not applicable
d)	Oxidising gases:	Not applicable
e)	Gases under pressure:	Not applicable
f)	Flammable liquids:	Not applicable
g)	Flammable solids:	Not applicable
h)	Self-reactive substances and mixtures:	Not applicable
i)	Pyrophoric liquids:	Not applicable
j)	Pyrophoric solids:	Not applicable
k)	Self-heating substances and mixtures:	Not applicable
l)	Substances and mixtures, which emit flammable gases in contact with water:	Not applicable
m)	Oxidising liquids:	Not applicable
n)	Oxidizing solids:	Not applicable
o)	Organic peroxides:	Not applicable
p)	Corrosive to metals:	Not applicable
q)	Desensitised explosives:	Not applicable

9.2.2 Other safety characteristics

a)	mechanical sensitivity	Not applicable
b)	self-accelerating polymerisation temperature	Not applicable
c)	formation of explosible dust/air mixtures	Not applicable
d)	acid/alkaline reserve	Not applicable
e)	evaporation rate	Not determinated

f)	miscibility	Not miscible with water
g)	conductivity	Not applicable
h)	corrosiveness	Not applicable
i)	gas group	Not applicable
j)	redox potential	Not applicable
k)	radical formation potential	Not applicable
l)	photocatalytic properties	Not applicable

Other physical and chemical parameters:

COV (Directive 2010/75 / EC) : Non disponibile

SECTION 10: Stability and reactivity

10.1 Reactivity

Stable under normal conditions of use and storage.

10.2 Chemical stability

Stable under normal conditions of use and storage.

10.3 Possibility of hazardous reactions

None known under normal conditions of use.

10.4 Conditions to avoid

a)	Temperature	:	do not subject to direct heating
b)	Pressure	:	nothing to report
c)	Light	:	nothing to report
d)	Static discharge	:	nothing to report
e)	Vibrations	:	nothing to report
f)	Other physical stresses	:	no other data available

10.5 Incompatible materials

a)	Water	:	avoid contact
b)	Air	:	nothing to report
c)	Acids	:	avoid contact
d)	Bases	:	avoid contact
e)	Oxidising agents	:	avoid contact
f)	Reducing agents	:	avoid contact
g)	Chemicals	:	avoid contact

10.6 Hazardous decomposition products

Under normal conditions the preparation does not decompose. Due to thermal decomposition, fumes harmful to health are released.

SECTION 11: Toxicological information

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

	Hazard classes		Information
a)	acute toxicity	:	Not classified. based on available data, the classification criteria are not met.
b)	skin corrosion/irritation	:	Not classified. based on available data, the classification criteria are not met.
c)	serious eye damage/irritation	:	Not classified. based on available data, the classification criteria are not met.
d)	respiratory or skin sensitisation	:	If brought into contact with the skin, it may cause skin sensitization.
e)	germ cell mutagenicity	:	Not classified. based on available data, the classification criteria are not met.
f)	carcinogenicity	:	Not classified. based on available data, the classification criteria are not met.
g)	reproductive toxicity	:	Not classified. based on available data, the classification criteria are not met.
h)	STOT-single exposure	:	Not classified. based on available data, the classification criteria are not met.
i)	STOT-repeated exposure	:	Not classified. based on available data, the classification criteria are not met.
j)	aspiration hazard	:	Not classified. based on available data, the classification criteria are not met.

Specific toxicological information for the substances contained (if available)

Substance:	Hydrocarbons, C4, 1,3-butadiene-free, polymd., triisobutylene fraction, hydrogenated		
CAS:	93685-81-5		
ORAL	**INHALATION**	**DERMAL**	**NOTEs**
Rat LD50: 5000 mg/kg bw	Rat LC50: 5000 mg/m³ air	Rabbit LD50: 2200 mg/kg bw	- -

The values included in this section are those available, at the time of writing this SDS, in the ECHA dossier in the section Toxicological information or from the supplier's indications.

Substance:	Tetrahydro-merhyl-methylpropyl)-pyran-4-ol		
CAS:	63500-71-0		
ORAL	**INHALATION**	**DERMAL**	**NOTEs**
Rat LD50: > 2000 mg/kg bw	- -	Rabbit LD50: > 2000 mg/kg bw	- -

The values included in this section are those available, at the time of writing this SDS, in the ECHA dossier in the section Toxicological information or from the supplier's indications.

Substance:	2,6-dimethyloct-7-en-2-ol / dihydromyrcenol		
CAS:	18479-58-8		
ORAL	**INHALATION**	**DERMAL**	**NOTEs**
Rat LD50: 4100 mg/kg bw	- -	- -	- -

The values included in this section are those available, at the time of writing this SDS, in the ECHA dossier in the section Toxicological information or from the supplier's indications.

Substance:	Diethyl malonate		
CAS:	105-53-3		
ORAL	**INHALATION**	**DERMAL**	**NOTEs**
LD50: 15794 mg/kg bw	- -	LD50: 16960 mg/kg bw	- -

The values included in this section are those available, at the time of writing this SDS, in the ECHA dossier in the section Toxicological information or from the supplier's indications.

EXPOSURE AND HEALTH EFFECTS	
Routes of exposure	- -
Inhalation risk	Evaporation at 20°C is negligible; a nuisance-causing concentration of airborne particles can, however, be reached quickly when dispersed.
Effects of short-term exposure	The substance is mildly irritating to the eyes.
Effects of long-term or repeated exposure	The effects on humans of this substance have been researched but have not been found.

SYMPTOMS BY SPECIFIC ROUTE OF EXPOSURE	
Inhalation	Cough
Skin	Redness.
Eyes	Redness.
Ingestion	No acute effects are expected
Notes :	- -

Substance:	Linalyl acetate
CAS:	115-95-7

ORAL	INHALATION	DERMAL	NOTEs
Rat LD50: > 9000 mg/kg bw	- -	Rabbit LD50: > 5000 mg/kg bw	- -

The values included in this section are those available, at the time of writing this SDS, in the ECHA dossier in the section Toxicological information or from the supplier's indications.

EXPOSURE AND HEALTH EFFECTS	
Routes of exposure	Skin absorption.
Inhalation risk	No indication can be given about the rate in which a harmful concentration of the substance in the air is reached on evaporation at 20°C.
Effects of short-term exposure	The substance is mildly irritating to the eyes.
Effects of long-term or repeated exposure	- -

SYMPTOMS BY SPECIFIC ROUTE OF EXPOSURE	
Inhalation	- -
Skin	- -
Eyes	Redness.
Ingestion	- -
Notes :	- -

Substance:	Hexamethylindanopyran
CAS:	1222-05-5

ORAL	INHALATION	DERMAL	NOTEs
Rat LD50: > 3000 mg/kg bw	Rat LC50: > 5040 mg/m³ air	Rat LD50: > 3250gm/kg bw	- -

The values included in this section are those available, at the time of writing this SDS, in the ECHA dossier in the section Toxicological information or from the supplier's indications.

Substance:	Linalool
CAS:	78-70-6

ORAL	INHALATION	DERMAL	NOTEs
Mouse LD50: 2 200 mg/kg bw	MOuse LC50: > 3.2 mg/L (3200 mg/m³)	Rabbi LD50: 5 610 mg/kg bw	- -

The values included in this section are those available, at the time of writing this SDS, in the ECHA dossier in the section Toxicological information or from the supplier's indications.

EXPOSURE AND HEALTH EFFECTS	
Routes of exposure	The substance can be absorbed into the body by inhalation of its aerosol and by ingestion
Inhalation risk	No indication can be given about the rate in which a harmful concentration of the substance in the air is reached on evaporation at 20°C.
Effects of short-term exposure	The substance is irritating to the eyes and the skin.
Effects of long-term or repeated exposure	The substance may have effects on the liver.

SYMPTOMS BY SPECIFIC ROUTE OF EXPOSURE	
Inhalation	- -
Skin	Redness. Ache.
Eyes	Redness. Ache.
Ingestion	- -
Notes :	- -

Substance:	Allyl caproate / Allyl hexanoate
CAS:	123-68-2

ORAL	INHALATION	DERMAL	NOTEs
Rat LD50: 218 mg/kg bw	- -	Rabbit LD50:820 mg/kg bw	- -

The values included in this section are those available, at the time of writing this SDS, in the ECHA dossier in the section Toxicological information or from the supplier's indications.

Substance:	d-Limonene
CAS:	5989-27-5

ORAL	INHALATION	DERMAL	NOTEs
Rat LD50: > 2000 mg/kg bw	- -	Rabbit LD50: 5000 mg/kg bw	- -

The values included in this section are those available, at the time of writing this SDS, in the ECHA dossier in the section Toxicological information or from the supplier's indications.

EXPOSURE AND HEALTH EFFECTS	
Routes of exposure	Inhalation, skin, eye, ingestion
Inhalation risk	No indication can be given about the rate at which a harmful concentration of this substance in the air is reached on evaporation at 20°C.
Effects of short-term exposure	The substance is irritating to the skin. The substance is mildly irritating to the eyes.
Effects of long-term or repeated exposure	Repeated or prolonged contact may cause skin sensitization.

SYMPTOMS BY SPECIFIC ROUTE OF EXPOSURE	
Inhalation	Slight irritation of the upper respiratory tract
Skin	Redness. Pain.
Eyes	Redness.
Ingestion	If ingested, it can enter the respiratory tract with even lethal consequences.
Notes	- -

Substance:	Beta-pinenes
CAS:	127-91-3

ORAL	INHALATION	DERMAL	NOTEs
Rat LD50: 3700 mg/kg bw	- -	Rat LD50: 2000 mg/kg bw	- -

The values included in this section are those available, at the time of writing this SDS, in the ECHA dossier in the section Toxicological information or from the supplier's indications.

Substance:	Allyl 3-cyclohexylpropionate
CAS:	2705-87-5

ORAL	INHALATION	DERMAL	NOTEs
Rat LD50: 380 mg/kg bw	- -	Rat LD50: 1600 mg/kg bw	- -

The values included in this section are those available, at the time of writing this SDS, in the ECHA dossier in the section Toxicological information or from the supplier's indications.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

The mixture does NOT contain substances identified as having endocrine-disrupting properties in accordance with the criteria established in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 in concentrations equal to or greater than 0.1% in weight.

11.2.2 Other information

No further data available

SECTION 12: Ecological information

Environmental Release Categories: ERC11a - Widespread use of articles with low release (indoor)

12.1 Toxicity

The product is dangerous for the environment as it is harmful to aquatic life with long lasting effects.
Use according to good working practices, avoiding to disperse the product in the environment.

Ecotoxicological information specific to the substances contained

Substance:	Hydrocarbons, C4, 1,3-butadiene-free, polymd., triisobutylene fraction, hydrogenated					
CAS:	93685-81-5					
LC50 – fish :	96h – Not calculable	**Species** :	Oncorhynchus mykiss	**Guideline** :	OECD Guideline 203	
EC50 – aquatic invertebrates :	48h – Not calculable	**Species** :	Daphnia Magna	**Guideline** :	OECD Guideline 202	
ERL50 - algae and cyanobacteria :	72h – Not calculable	**Species** :	Desmodesmus subspicatus	**Guideline** :	OECD Guideline 201	
NOEC Cronica fish :	- -	**Species** :	- -	**Guideline** :	- -	
NOEC Cronica aquatic invertebrates :	- -	**Species** :	- -	**Guideline** :	- -	
NOErL Cronic algae and cyanobacteria :	- -	**Species** :	- -	**Guideline** :	- -	

Substance:	Tetrahydro-merhyl-methylpropyl)-pyran-4-ol				
CAS:	63500-71-0				
LC50 – fish	96h-354 mg/L	**Species** :	Oncorhychus mykiss	**Guidelines** :	OCSE 203
EC50 – aquatic invertebrates	48h-320 mg/L	**Species** :	Daphnia magna	**Guidelines** :	OCSE 202
EC50 - aquatic algae and cyanobacteria	72h- >100 mg/L	**Species** :	Desmodesmus subspicatus	**Guidelines** :	OCSE 201
NOEC chronic fish	- -	**Species** :	- -	**Guidelines** :	- -
NOEC chronic invertebrates	- -	**Species** :	- -	**Guidelines** :	- -
NOEC chronic algae and cyanobacteria	- -	**Species** :	- -	**Guidelines** :	- -

Substance:	2,6-dimethyloct-7-en-2-ol / dihydromyrcenol				
CAS:	18479-58-8				
LC50 – fish	96h - 27.8 mg/l	**Species** :	Oncorhynchus mykiss	**Guidelines** :	OECD 203
EC50 – aquatic invertebrates	48h - 38 mg/L	**Species** :	Daphnia magna	**Guidelines** :	OECD 202
EC50 - aquatic algae and cyanobacteria	72h - 80 mg/L	**Species** :	Desmodesmus subspicatus	**Guidelines** :	OECD 201
NOEC chronic fish	96h - 19.9 mg/l	**Species** :	Oncorhynchus mykiss	**Guidelines** :	OECD 210
NOEC chronic invertebrates	48h - 10 mg/L	**Species** :	Daphnia magna	**Guidelines** :	OECD 211
NOEC chronic algae and cyanobacteria	72h – 25 mg/L	**Species** :	Desmodesmus subspicatus	**Guidelines** :	OECD 201

Substance:	Diethyl malonate				
CAS:	105-53-3				
LC50 – fish	96h – 11,8 mg/L	**Species** :	Pimephales promelas	**Guideline** :	- -
EC50 – aquatic invertebrates	48h – 179 mg/L	**Species** :	Daphnia Magna	**Guideline** :	EU Method C.2 (Acute Toxicity for Daphnia)
EC50 - aquatic algae and cyanobacteria	72h – 508.2 mg/L	**Species** :	Desmodesmus subspicatus	**Guideline** :	88/302/EEC
NOEC chronic fish	- -	**Species** :	- -	**Guideline** :	- -
NOEC chronic invertebrates	- -	**Species** :	- -	**Guideline** :	- -
NOEC chronic algae and cyanobacteria	72h – 30.1 mg/L	**Species** :	Desmodesmus subspicatus	**Guideline** :	88/302/EEC

Substance:	Linalyl acetate				
CAS:	115-95-7				
LC50 – fish	96h-11 mg/L	**Species** :	Cyprinus carpio	**Guidelines** :	OECD 203
EC50 – aquatic invertebrates	48h-59 mg/L	**Species** :	Daphnia magna	**Guidelines** :	OECD 202
EC50 - aquatic algae and cyanobacteria	96h-68 mg/L	**Species** :	Pseudokirchneriella subcapitata	**Guidelines** :	OECD 201
NOEC chronic fish	- -	**Species** :	- -	**Guidelines** :	- -
NOEC chronic invertebrates	- -	**Species** :	- -	**Guidelines** :	- -
NOEC chronic algae and cyanobacteria	96h-3.9 mg/L	**Species** :	Pseudokirchneriella subcapitata	**Guidelines** :	OECD 201

Substance:	Hexamethylindanopyran				
CAS:	1222-05-5				
LC50 – fish	96h: 0.95 mg/L	**Species** :	Medaka larvae	**Guideline** :	OECD 203
EC50 – aquatic invertebrates	48h: 0.3 mg/L	**Species** :	Daphnia magna	**Guideline** :	OECD 202
ERL50 - algae and cyanobacteria	72h: > 0.7 mg/L	**Species** :	Pseudokirchneriella subcapitata	**Guideline** :	OECD 201
NOEC Cronica fish	- -	**Species** :	- -	**Guideline** :	- -
NOEC Cronica aquatic invertebrates	48h: 0.3 mg/l	**Species** :	- -	**Guideline** :	- -
NOErL Cronic algae and cyanobacteria	72h: 0.23 mg/L	**Species** :	Pseudokirchneriella subcapitata	**Guideline** :	OECD 201

Substance:	Linalool				
CAS:	78-70-6				
LC50 – fish	96h - 27.8 mg/L	**Species** :	Salmo gairdneri	**Guideline** :	OECD Guideline 203
EC50 – aquatic invertebrates	48h - 59 mg/L	**Species** :	Daphnia magna	**Guideline** :	OECD Guideline 202
ERL50 - algae and cyanobacteria	96h - 156.7 mg/L	**Species** :	Desmodesmus subspicatus	**Guideline** :	DIN 38412 L 9
NOEC Cronic fish	96h-<3.5 mg/L	**Species** :	Salmo gairdneri	**Guideline** :	OECD Guideline 203
NOEC Cronic aquatic invertebrates	48h-25 mg/L	**Species** :	Daphnia magna	**Guideline** :	OECD Guideline 202
NOErL Cronic algae and cyanobacteria	96h - 54.3 mg/L	**Specie** :	Desmodesmus subspicatus	**Guideline** :	DIN 38412 L 9

Substance:	Allyl caproate / Allyl hexanoate				
CAS:	123-68-2				
LC50 – fish :	96h - 0.117 mg/L	**Species** :	Danio rerio	**Guidelines** :	OECD203
EC50 – aquatic invertebrates :	48h - 2 mg/L	**Species** :	Daphnia Magna	**Guidelines** :	OECD202
EC50 - aquatic algae and cyanobacteria :	72h – 4.6 mg/L	**Species** :	Desmodesmus subspicatus	**Guidelines** :	OECD201
NOEC chronic fish :	96h - - - mg/L	**Species** :	- -	**Guidelines** :	- -

NOEC chronic invertebrates	:	48h - - - mg/L	**Species** :	- -	**Guidelines** :	- -
NOEC chronic algae and cyanobacteria	:	72h - 0.255 mg/L	**Species** :	Desmodesmus subspicatus	**Guidelines** :	OECD201

Substance:	d-Limonene					
CAS:	5989-27-5					
LC50 – fish	96h-< 1 mg/L	**Species** :	Pimephales promelas	**Guideline** :	OECD 203	
EC50 – aquatic invertebrates	48h-0.307 mg/L	**Species** :	Daphnia magna	**Guideline** :	OECD 202	
ERL50 - algae and cyanobacteria	72h-0.32 mg/L	**Species** :	Pseudokirchneriella subcapitata	**Guideline** :	OECD 201	
NOEC Cronica fish	- -	**Species** :	- -	**Guideline** :	- -	
NOEC Cronica aquatic invertebrates	- -	**Species** :	- -	**Guideline** :	- -	
NOErL Cronic algae and cyanobacteria	72h-0.174 mg/L	**Species** :	Pseudokirchneriella subcapitata	**Guideline** :	OECD 201	

Substance:	Beta-pinenes					
CAS:	127-91-3					
LC50 – fish	:	96h – 0.502 mg/L	**Species** :	Cyprinus carpio	**Guideline** :	OECD 203
EC50 – aquatic invertebrates	:	48h - 1.194 mg/L	**Species** :	Daphnia magna	**Guideline** :	OECD 202
ERL50 - algae and cyanobacteria	:	72h - 0.826 mg/L	**Species** :	Pseudokirchneriella subcapitata	**Guideline** :	OECD 201
NOEC Cronica fish	:	- -	**Species** :	- -	**Guideline** :	- -
NOEC Cronica aquatic invertebrates	:	- -	**Species** :	- -	**Guideline** :	- -
NOErL Cronic algae and cyanobacteria	:	72h - 0.378 mg/L	**Species** :	Pseudokirchneriella subcapitata	**Guideline** :	OECD 201

Substance:	Allyl 3-cyclohexylpropionate					
CAS:	2705-87-5					
LC50 – fish	:	96h – 0.13 mg/L	**Species** :	Pimephales promelas	**Guideline** :	OECD 203
EC50 – aquatic invertebrates	:	48h – 3.8 mg/L	**Species** :	Daphnia Magna	**Guideline** :	OECD 202
ERL50 - algae and cyanobacteria	:	72h – 3 mg/L	**Species** :	Pseudokirchneriella subcapitata	**Guideline** :	OECD 201
NOEC Cronica fish	:	- -	**Species** :	- -	**Guideline** :	- -
NOEC Cronica aquatic invertebrates	:	- -	**Species** :	- -	**Guideline** :	- -
NOErL Cronic algae and cyanobacteria	:	72h – 1.6 mg/L	**Species** :	Pseudokirchneriella subcapitata	**Guideline** :	OECD 201

12.2 Persistence and degradability

Data not available for the mixture.

Specific biodegradation information for the substances contained

Substance:	Hydrocarbons, C4, 1,3-butadiene-free, polymd., triisobutylene fraction, hydrogenated		
CAS:	93685-81-5		
Biodegradation in water:	Biodegradable	**Test time :**	28d

Substance:	Tetrahydro-merhyl-methylpropyl)-pyran-4-ol		
CAS:	63500-71-0		
Biodegradation in water:	Not easily biodegradable	**Test time :**	- -

Substance:	2,6-dimethyloct-7-en-2-ol / dihydromyrcenol		
CAS:	18479-58-8		
Biodegradation in water:	Easily biodegradable	**Test time :**	28d

Substance:	5-(2,2,3-Trimethyl-3-cyclopentenyl)-3-methylpentan-2-ol		
CAS:	65113-99-7		
Valore di biodegradazione in acqua :	- -	- -	29d → 5%

Substance:	Diethyl malonate		
CAS:	105-53-3		
Biodegradation in water:	Easily biodegradable	**Test time :**	28d

Substance:	Linalyl acetate		
CAS:	115-95-7		
Biodegradation in water:	Easily biodegradable	**Test time :**	28d

Substance:	Hexamethylindanopyran		
CAS:	1222-05-5		
Biodegradation in water	Not readily biodegradable	**Test time :**	28d

Substance:	Linalool		
CAS:	78-70-6		
Biodegradation in water:	Easily biodegradable	**Test time :**	28d

Substance:	Allyl caproate / Allyl hexanoate		
CAS:	123-68-2		
Biodegradation in water:	Easily biodegradable	**Test time :**	10d

Substance:	d-Limonene		
CAS:	5989-27-5		
Biodegradation in water:	Readily biodegradable	**Test time :**	28 d

Substance:	Beta-pinenes		
CAS:	127-91-3		
Biodegradation in water:	Easily biodegradable	**Test time :**	28d

Substance:	Allyl 3-cyclohexylpropionate		
CAS:	2705-87-5		
Biodegradation in water:	Easily biodegradable	**Time test :**	28d

12.3 Bioaccumulative potential

Data not available for the mixture.

Bioaccumulation information specific to the substances contained

Substance:	Hydrocarbons, C4, 1,3-butadiene-free, polymd., triisobutylene fraction, hydrogenated
CAS:	93685-81-5

Partition coefficient: n-octanol/water	:	The estimated log Pow in Petrorisk using SPARC v4.2 is 6.96
BCF	:	Not available

Substance:	Tetrahydro-merhyl-methylpropyl)-pyran-4-ol
CAS:	63500-71-0
Partition coefficient: n-octanol / water :	Log Kow (Log Pow): 1.65
BCF :	- -

Substance:	2,6-dimethyloct-7-en-2-ol / dihydromyrcenol
CAS:	18479-58-8
Partition coefficient: n-octanol / water	Log Kow (Log Pow): 3.25 a 40 °C
BCF	64.8 L/kg ww

Substance:	Diethyl malonate
CAS:	105-53-3
Partition coefficient: octanol/water :	Log Kow (Log Pow): 0.96 a 20°C
BCF :	In accordance with column 2 of Annex IX of REACH, testing for this endpoint is not scientifically necessary and should not be conducted as the test chemical has a low bioaccumulation potential based on logKow ≤ 3

Substance:	Linalyl acetate
CAS:	115-95-7
Partition coefficient: n-octanol / water	Log Kow (Log Pow): - 3.9 a 25 °C
BCF	174 L/kg w/w

Substance:	Hexamethylindanopyran
CAS:	1222-05-5
Partition coefficient: n-octanol / water	Log Kow (Log Pow): 5.3 a 25°C
BCF	(aquatic species): 1 584 L / kg body weight (terrestrial species): 2 395 L / kg body weight

Substance:	Linalool
CAS:	78-70-6
Partition coefficient: octanol/water :	Log Kow (Log Pow): - 2.9 a 20 °C
BCF :	The study should not be conducted because the substance has a low bioaccumulation potential based on log Kow <=3

Substance:	Allyl caproate / Allyl hexanoate
CAS:	123-68-2
Partition coefficient: octanol/water :	Log Kow (Log Pow): 3.191 a 20°C
BCF :	102,3 l/kg p.c. – The substance is considered not to bioaccumulate.

Substance:	d-Limonene
CAS:	5989-27-5
Partition coefficient: n-octanol / water :	Log Kow (Log Pow): 4.38 a 25°C
BCF :	690.1 L/kg ww

Substance:	Beta-pinenes
CAS:	127-91-3
Coefficiente di ripartizione: n-ottanolo/acqua :	Log Kow (Log Pow): 4.4 at 25 °C
BCF :	Aquatic species: 838 L/kg ww

Substance:	Allyl 3-cyclohexylpropionate
CAS:	2705-87-5
Partition coefficient: n-octanol / water :	Log Kow (Log Pow): 4.276 a 20°C
BCF :	861 L/kg ww

12.4 Mobility in soil

Data not available for the mixture.

Mobility information in soil specific to the substances contained

Substance:	Hydrocarbons, C4, 1,3-butadiene-free, polymd., triisobutylene fraction, hydrogenated
CAS:	93685-81-5

The standard tests for this endpoint are intended for single substances and are not appropriate for these complex substances.

Substance:	Tetrahydro-merhyl-methylpropyl)-pyran-4-ol
CAS:	63500-71-0

Log Koc: 1.62 – The substance is not expected to be absorbed from the soil.

Substance:	2,6-dimethyloct-7-en-2-ol / dihydromyrcenol
CAS:	18479-58-8

A study was conducted following the OECD 121 guideline: the adsorption coefficient of the test element was determined to be 177.83 (Log Koc = 2.25). Given its high solubility in water, this value is low enough to suggest that the test element will show limited uptake to soil or sediment particles and will primarily depart into water (either surface water or groundwater compartments).

Substance:	Diethyl malonate
CAS:	105-53-3

The study does not need to be conducted because the substance has a low n-octanol/water partition coefficient and the adsorption potential of this substance is related to this parameter

Substance:	Linalyl acetate
CAS:	115-95-7

Log Koc = 2,6359 (Koc a 20 °C: 432.4) based on this result, adsorption to the soil solid phase is not expected.

Substance:	Hexamethylindanopyran
CAS:	1222-05-5

Log 4.16 (Koc: 14.300 L/kg) the substance will have a high potential for adsorption into sediment/soil.

Substance:	Linalool
CAS:	78-70-6

In accordance with column 2 of Annex VIII of REACH, adsorption/desorption tests (both screening and further tests) are not required as the substance is expected to have a low potential for adsorption based on its log Kow low (<3) and the substance is readily biodegradable and therefore degrades rapidly in the environment.

Substance:	Allyl caproate / Allyl hexanoate
CAS:	123-68-2

It is not necessary to determine the log Koc value as the substance and its breakdown products are rapidly degraded in the environment.

Substance:	d-Limonene
CAS:	5989-27-5

Log Koc: 3.383 (Koc: 2413 L/kg a 20°C)

Substance:	Beta-pinenes
CAS:	127-91-3

Koc at 20 °C: 3 317

Substance:	Allyl 3-cyclohexylpropionate
CAS:	2705-87-5

Koc a 20°C: 1820 [logKoc : 3.26]

12.5 Results of PBT and vPvB assessment

The chemical safety report is not required for the mixture. However, based on the available data, the mixture does not contain PBT or vPvB substances in a percentage higher than 0.1 in accordance with Regulation 1907/2006, annex XIII.

12.6 Endocrine disrupting properties

The mixture does NOT contain substances identified as having endocrine-disrupting properties in accordance with the criteria established in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 in concentrations equal to or greater than 0.1% in weight.

12.7 Other adverse effects

Classification for water pollution in Germany (AwSV, vom 18. April 2017): WGK 2: Dangerous for the waters.

SECTION 13: Disposal considerations

The substance/mixture shall not be removed through the sewerage system.

13.1 Waste treatment methods

Container material and type:
Glass / Plastic / Paper / Metal / Composite (identify the exact material from the symbols on the packaging).
Methods for waste treatment of the substance or mixture:
DANGER FEATURES (Directive 2008/98 / EC): No hazard characteristics identified
RECOVERY OPERATIONS (Directive 2008/98 / EC): R 13 Storage of waste pending any of the operations numbered R 1 to R 12
DISPOSAL OPERATIONS (Directive 2008/98 / EC): D13 - Blending or mixing prior to submission to any of the operations numbered D 1 to D 12
EER CODE : 20 01 39 - plastic
Methods for handling any contaminated packaging:
DANGER FEATURES (Directive 2008/98 / EC): No hazard characteristics identified
RECOVERY OPERATIONS (Directive 2008/98 / EC): R 13 Storage of waste pending any of the operations numbered R 1 to R 12
DISPOSAL OPERATIONS (Directive 2008/98 / EC): D13 - Blending or mixing prior to submission to any of the operations numbered D 1 to D 12
EER CODE : 15 01 02 plastic packaging
Physical / chemical properties that can affect waste treatment:
None
Special precautions for recommended waste treatment:
The hazard characteristics, disposal and recovery operations and the suggested EWC codes refer to the product as it is without considering any changes due to use. It is therefore recommended, before disposal, to reclassify the waste, also evaluating its origin. Any mixing of different types of non-hazardous waste and any mixture of different hazardous waste is prohibited (Article 23 of Directive 2008/98 / EC). Disposal must be entrusted to an authorized waste treatment company, in compliance with national and possibly local regulations

SECTION 14: Transport information

Not included in the scope of the regulations on the transport of dangerous goods: by road (ADR); by rail (RID); by air (ICAO / IATA); by sea (IMDG).

		ADR	IMDG	IATA
14.1	UN number or ID number	Not applicable		
14.2	UN proper shipping name	Not applicable		
14.3	Transport hazard class(es)	Not applicable		
14.4	Packing group	Not applicable		
14.5	Environmental hazards	Not applicable		
14.6	Special precautions for user	Not applicable		
14.7	Maritime transport in bulk according to IMO instruments	Not applicable		

SECTION 15: Regulatory information

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

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.
REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.
Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives.
Regulation (EU) No 528/2012 of the European Parliament and of the Council of 22 May 2012 concerning the making available on the market and use of biocidal products.
Commission Delegated Regulation (EU) 2017/2100 of 4 September 2017 setting out scientific criteria for the determination of endocrine-disrupting properties pursuant to Regulation (EU) No 528/2012 of the European Parliament and Council.
Commission Regulation (EU) No 1357/2014 of 18 December 2014 replacing Annex III to Directive 2008/98/EC of the European Parliament and of the Council on waste and repealing certain Directives
COMMISSION DECISION of 18 December 2014 amending Decision 2000/532/EC on the list of waste pursuant to Directive 2008/98/EC of the European Parliament and of the Council
REGULATION (EC) No 648/2004 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 31 March 2004 on detergents
Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control)
Directive 2004/42/CE of the European Parliament and of the Council of 21 April 2004 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products and amending Directive 1999/13/EC

DIRECTIVE 2012/18/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 on the control of major-accident hazards involving dangerous substances, amending and subsequently repealing Council Directive 96/82/EC

Product: CESARE ENERGY **Category SEVESO:** - -

Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors, amending Regulation (EC) No 1907/2006 and repealing Regulation (EU) No 98/2013

The mixture does not contain an explosive precursor.

15.2 Chemical safety assessment

Chemical safety assessment for the mixture not foreseen. This safety data sheet contains one or more Exposure Scenarios in an integrated form. The content, where relevant, has been included in sections 1.2, 8, 9, 12, 15 and 16 of the same safety data sheet

SECTION 16: Other information

16.1 Indication of any points of the SDS that have been revised

This sheet completely replaces all previous versions.

16.2 Key abbreviations and acronyms used in this SDS

APVR	Respiratory protective equipment	**FPO**	Operational protection factor
ATE	Acute Toxicity Estimates	**GHS**	Globally Harmonized System
BCF	Bioconcentration Factor	**HP**	Hazardous Properties
CAS	Chemical abstract service	**IMO**	International Maritime Organization
CE	European Community	**ISO**	International Standard Organization
CLP	Classification, Labelling and Packaging	**LC50**	Median lethal concentration
COV	Volatile Organic Compounds	**LD50**	Median lethal dose
DNEL	Derived No Effect Level	**N.A.S.**	Not otherwise specified
DPI	Dispositivi di Protezione Individuale	**NOEC**	No observed effect concentration
EC	European Comunity	**ONU**	United Nations Organization
EC50	Half maximal effective concentration	**PBT**	Persistent, Bioaccumulative and Toxic Substances
ECHA	European Chemicals Agency	**vPvB**	Very Persistent and very Bioaccumulative substances
EER	European Waste List	**ppm**	Parts per milion
EmS	Emergency Schedules	**PROC**	Category of processes
EN	European normalization	**REACH**	Regulation on Registration, Evaluation, Authorisation and Restriction of Chemicals
ERC	Environmental release categories	**STOT**	Specific target organ toxicity
EUH	Supplemental hazard information	**STP**	Sewage treatment plant
EuPCS	European Product Categorisation System	**UE**	European Union
FPN	Protection factor Nominal	**UFI**	Unique Identifier of Formula
FFP	Filtering Facepiece	**UNI**	Italian Standard Orgnization.

16.3 Full text of the Classification Information set out in Section 3

Description of the hazard class and category codes set out in section 3	Description of the hazard statements set out in section 3
Flam. Liq. 3 - Flammable liquids, Hazard Category 3	H226 - Flammable liquid and vapour.
Asp. Tox. 1 - Aspiration hazard, Hazard Category 1	H304 - May be fatal if swallowed and enters airways.
Aquatic Chronic 4 -Hazardous to the aquatic environment — Chronic Hazard, Category 4	H413 - May cause long lasting harmful effects to aquatic life.
Eye Irrit. 2 - Serious eye damage/eye irritation, Hazard Category 2	H319 - Causes serious eye irritation
Skin Irrit. 2 - Skin corrosion/irritation, Hazard Category 2	H315 - Causes skin irritation
Aquatic Chronic 2 -Hazardous to the aquatic environment — Chronic Hazard, Category 2	H411 - Toxic to aquatic life with long lasting effects.
STOT SE 3 - Specific target organ toxicity — Single exposure, Hazard Category 3, Respiratory tract irritation	H335 - May cause respiratory irritation.
Skin. Sens. 1B - Sensitisation — Skin, hazard category 1B	H317 - May cause an allergic skin reaction.
Acute Tox. 4 - Acute toxicity (oral), Hazard Category 4	H302 - Harmful if swallowed.
Skin. Sens. 1 - Sensitisation — Skin, hazard category 1	H317 - May cause an allergic skin reaction.
Aquatic Chronic 1 -Hazardous to the aquatic environment — Chronic Hazard, Category 1	H410 - Very toxic to aquatic life with long lasting effects
Acute Tox 3 - Acute toxicity (oral), Hazard Category 3	H301 - Toxic if swallowed.
Acute Tox 3 - Acute toxicity (dermal), Hazard Category 3	H311 - Toxic in contact with skin.
Acute Tox 3 - Acute toxicity (inhal.), Hazard Category 3	H331 - Toxic if inhaled.
Aquatic Acute 1 -Hazardous to the aquatic environment — AcuteHazard, Category 1	H400 - Very toxic to aquatic life.
Aquatic Chronic 3 -Hazardous to the aquatic environment — Chronic Hazard, Category 3	H412 - Harmful to aquatic life with long lasting effects
Eye Dam. 1 - Serious eye damage/eye irritation, Hazard Category 1	H318 - Causes serious eye damage.
Acute Tox 4 - Acute toxicity (dermal), Hazard Category 4	H312 - Harmful in contact with skin.
Acute Tox 4 - Acute toxicity (inhal.), Hazard Category 4	H332 - Harmful if inhaled

Indicazioni di pericolo supplementari esposte alla sezione 3

EUH066 =Repeated exposure may cause skin dryness or cracking

M-Factor Means a multiplying factor. It is applied to the concentration of a substance classified as hazardous to the aquatic environment acute category 1 or chronic category 1.

Notes related to the identification, classification and labeling of substances defined in Annex VI of CLP C = Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers. In this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers.

16.4 Bibliographical references and main data sources

ECHA	European Chemicals Agency	**OSHA**	European Agency for Safety and Health at Work	**IARC**	International Agency for Research on Cancer
TOXNET	Toxicology Data Network	**WHO**	World Health Organization	**ACGIH**	American Conference of Governmental Industrial Hygienists
CheLIST	Chemical Lists Information System	**ICSCs**	International Chemical Safety Cards	**ILO**	International Labour Organization
IPCS	International Programme on Chemical Safety (Cards)	**NIOSH**	Registry of toxic effects of chemical substances (1983)	**IFA**	Institut fur Arbeitsschutz der Deutschen Gesetzlichen Unfallversicherung

16.5 Normative references and / or documents (from which the data in section 8.1 derive)

Code [1]	State	Bibliography / documents --> LINK	
AUS	Australia	https://www.dguv.de/ifa/...../limit-values-australia/index-2.jsp	https://engage.swa.gov.au/workplace-exposure-standards-review
		https://www.safeworkaustralia.gov.au/exposure-standards#exposure-standards-in-australia	
AUT	Austria	https://www.dguv.de/ifa/...../limit-values-austria/index-2.jsp	https://www.jusline.at/gesetz/gkv_2011
		https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen&Gesetzesnummer=20001418	
BEL	Belgium	https://www.dguv.de/ifa/...../limit-values-belgium/index-2.jsp	https://employment.belgium.be/en
BGR	Bulgaria	https://pirogov.eu/bg/	
CAN	Canada-Ontario	https://www.dguv.de/ifa/...../limit-values-canada-ontario/index-2.jsp	https://www.labour.gov.on.ca/english/hs/pubs/oel_table.php
CAN	Canada-Québec	https://www.dguv.de/ifa/...../limit-values-canada-québec/index-2.jsp	http://legisquebec.gouv.qc.ca/fr/showdoc/cr/S-.....
		https://www.csst.qc.ca/Pages/index.aspx	
CYP	Cyprus	http://www.mlsi.gov.cy/	
CAE	Czech Republic	https://www.mzcr.cz/	
HRV	Croazia	https://www.hzt.hr	
DNK	Denmark	https://www.dguv.de/ifa/...../limit-values-denmark/index-2.jsp	https://www.retsinformation.dk/eli/lta/2019/1458
EST	Estonia	http://www.16662.ee/	
EU[2]	European Union	https://www.dguv.de/ifa/...../limit-values-european-union/index-2.jsp	https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:31998L0024
		https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1523372586043&uri=CELEX:32004L0037	
FIN	Finland	https://www.dguv.de/ifa/...../limit-values-finland/index-2.jsp	https://julkaisut.valtioneuvosto.fi/handle/10024/160967

FRA	France	https://www.dguv.de/ifa/...../limit-values-france/index-2.jsp	https://www.anses.fr/fr
		http://www.inrs.fr/accueil/dms/inrs/CataloguePapier/ED/TI-ED-984/ed984.pdf	
DEU	Germany (AGS)	https://www.dguv.de/ifa/...../limit-values-germany-(ags)/index-2.jsp	https://www.baua.de/DE/...../Regelwerk/TRGS/pdf/TRGS-900.pdf
DEU	Germany (DFG)	https://www.dguv.de/ifa/...../limit-values-germany-(dfg)/index-2.jsp	https://www.dfg.de/en/dfg_profile/...../health_hazards/index.html
		https://www.dfg.de/dfg_profil/gremien/senat/arbeitsstoffe/publikationen/index.html	
GRC	Greece	http://www.gcsl.gr/	
HUN	Hungary	https://www.dguv.de/ifa/...../limit-values-hungary/index-2.jsp	https://www.biztonsagiadatlap.hu/...../5_2020.-II.-6.-ITM-rendelet.pdf
ISL	Iceland	https://www.ust.is/the-environment-agency-of-iceland/chemicals/	
IRL	Ireland	https://www.dguv.de/ifa/...../limit-values-ireland/index-2.jsp	https://www.hsa.ie/eng/..../2016_CodePracticeChemicalAgentsRegulations/
ITA	Italy	https://www.dguv.de/ifa/...../limit-values-italy/index-2.jsp	http://www.preparatipericolosi.iss.it
JPN	Japan (MHLW)	https://www.dguv.de/ifa/...../limit-values-japan/index-2.jsp	https://www.mhlw.go.jp/english/index.html
JPN	Japan (JSOH)	https://www.dguv.de/ifa/...../limit-values-japan-jsoh/index-2.jsp	https://www.sanei.or.jp/
LVA	Latvia	https://www.dguv.de/ifa/...../limit-values-latvia/index-2.jsp	https://likumi.lv/doc.php?id=157382&from=off
LTU	Lituania	http://www.gamta.lt/	
LUX	Luxembourg	http://www.ms.public.lu/fr/	
MLT	Malta	https://mccaa.org.mt/	
NZL	New Zealand	https://www.dguv.de/ifa/...../limit-values-new-zealand/index-2.jsp	https://worksafe.govt.nz/./work-health/./.-std-biol-exposure-indices/
NOR	Norway	http://www.miljodirektoratet.no/	https://www.fhi.no/en/
CHN	People's Republic of China	https://www.dguv.de/ifa/...../limit-values-china/index-2.jsp	http://www.nhfpc.gov.cn/zhuz/pyl/200704/38838.shtml
POL	Poland	https://www.dguv.de/ifa/...../limit-values-poland/index-2.jsp	http://www.ciop.pl/
PRT	Portugal	http://www.inem.pt/ciav	
ROU	Romania	https://www.dguv.de/ifa/...../limit-values-romania/index-2.jsp	http://www.mmuncii.ro/.../5114-11042018_modif_HG-1218_Ag_chimici.pdf
SGP	Singapore	https://www.dguv.de/ifa/...../limit-values-singapore/index-2.jsp	https://sso.agc.gov.sg/Act/WSHA2006
SVK	Slovakia	http://www.ntic.sk/	
SVN	Slovenia	http://www.uk.gov.si/	
KOR	South Korea	https://www.dguv.de/ifa/...../limit-values-south-korea/index-2.jsp	http://www.kiha.kr/main/community_view.htm?uid=763&tbn=gongi&page=3
ESP	Spain	https://www.dguv.de/ifa/...../limit-values-spain/index-2.jsp	https://www.insst.es/
SWE	Sweden	https://www.dguv.de/ifa/...../limit-values-sweden/index-2.jsp	https://www.av.se/../hygieniska-gransvarden-afs-20181-foreskrifter/
CHE	Switzerland	https://www.dguv.de/ifa/...../limit-values-switzerland/index-2.jsp	http://suissepro.org/
		https://www.suva.ch/de-CH/.....	
NLD	The Netherlands	https://www.dguv.de/ifa/...../limit-values-the-netherlands/index-2.jsp	https://www.ser.nl/en
		https://wetten.overheid.nl/BWBR0008587/2017-07-01#BijlageXIII	
TUR	Turkey	https://www.dguv.de/ifa/...../limit-values-turkey/index-2.jsp	
USA	USA - NIOSH	https://www.dguv.de/ifa/...../limit-values-usa-niosh/index-2.jsp	https://www.cdc.gov/niosh/
USA	USA - OSHA	https://www.dguv.de/ifa/...../limit-values-usa-osha/index-2.jsp	www.osha.gov
GBR	United Kingdom	https://www.dguv.de/ifa/...../limit-values-united-kingdom/index-2.jsp	https://www.hse.gov.uk/research/hsl_pdf/2002/hsl02-23.pdf

(1) ISO3166-1 alpha-3 (2) NO ISO CODE

16.6 Procedures used to derive classification under Regulation (EC)1272/2008 [CLP] in relation to mixtures

Classification according to Regulation (EC) No. 1272/2008	Classification procedure
H317 Skin. Sens. 1	Presence of component in concentration equal to or higher than the defined limit - Annex I, sect. 3.4.3 - Respiratory or skin sensitisation
H412 Aquatic Chronic 3	Additivity theory - Annex I, section 4.1.3 - Hazardous to the aquatic environment

16.7 Any appropriate training courses for workers in order to ensure the protection of human health and the environment

- Training course on the management and interpretation of the SDS
- ADR training for personnel involved in handling
- Training on the use of PPE

More information

Safety Data Sheet compliant with regulation (EU) n. 2020/878 of 18 June 2020

This document has been drawn up by a competent SDS technician who has received adequate training and is certified according to the reference practice UNI / PdR 60: 2019. Certificate issued by INTERTEK ITALIA S.p.A. Registration number: EPTAS2018-00225 exp. 25-Nov-2023

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