

Trade name: Duftstoff Citrone**Product no.:** 167999**Current version :** 1.0.0, issued: 26.11.2020**Replaced version: -, issued: -****Region:** MT**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier**

Trade name

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

Fragrances

Uses advised against

No data available.

1.3 Details of the supplier of the safety data sheet**Address**

Koch-Chemie GmbH

Einsteinstr. 42

D-59423 Unna

Telephone no. +49-2303-9 86 70-0

Fax no. +49-2303-9 86 70-26

1.4 Emergency telephone number

No data available.

SECTION 2: Hazards identification**2.1 Classification of the substance or mixture****Classification in accordance with Regulation (EC) No 1272/2008 (CLP)**

Acute Tox. 4; H332

Aquatic Acute 1; H400

Aquatic Chronic 1; H410

Asp. Tox. 1; H304

Eye Irrit. 2; H319

Flam. Liq. 3; H226

Skin Irrit. 2; H315

Skin Sens. 1; H317

Classification information

This product is assessed and classified using the methods and criteria below referred to in Article 9 of Regulation (EC) n° 1272/2008:

Physical hazards: determined through assessment data based on the methods or standards referred to in part 2 of Annex I to CLP

Health hazards and environmental hazards: determined through toxicological and ecotoxicological assessment data based on the methods or standards referred to in Part 3, 4 and 5 of Annex I to CLP.

2.2 Label elements**Labelling according to Regulation (EC) No 1272/2008 (CLP Regulation)****Hazard pictograms**

GHS02



GHS07



GHS08



GHS09

Signal word

Danger

Hazardous component(s) to be indicated on label:

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Orange, sweet, ext.
citral
dodecanal
pin-2(3)-ene**Hazard statement(s)**

H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P331	Do NOT induce vomiting.
P370+P378	In case of fire: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide to extinguish.
P391	Collect spillage.

2.3 Other hazards

PBT assessment

According to the information provided in the supply chain, the mixture does not contain > 0.1% of a substance that is considered to be PBT.

vPvB assessment

According to the information provided in the supply chain, the mixture does not contain > 0.1% of a substance that is considered to be vPvB.

SECTION 3: Composition/information on ingredients**3.1 Substances**

Not applicable. The product is not a substance.

3.2 Mixtures**Hazardous ingredients**

No	Substance name	Additional information	
	CAS / EC / Index / REACH no	Classification (EC) 1272/2008 (CLP)	Concentration %
1	2-butoxyethanol		
	111-76-2 203-905-0 603-014-00-0 01-2119475108-36	Acute Tox. 4; H302 Acute Tox. 4; H312 Acute Tox. 4; H332 Eye Irrit. 2; H319 Skin Irrit. 2; H315	>= 50,00 - < 70,00 wt%
2	Orange, sweet, ext.		
	8028-48-6 232-433-8 - 01-2119493353-35	Asp. Tox. 1; H304 Flam. Liq. 3; H226 Skin Irrit. 2; H315 Skin Sens. 1; H317 Aquatic Chronic 1; H410	>= 25,00 - < 50,00 wt%

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		Aquatic Acute 1; H400		
3	citral			
	5392-40-5 226-394-6 605-019-00-3 01-2119462829-23	Eye Irrit. 2; H319 Skin Irrit. 2; H315 Skin Sens. 1B; H317	< 5,00	wt%
4	7-methyl-3-methyleneocta-1,6-diene			
	123-35-3 204-622-5 - 01-2119514321-56	Asp. Tox. 1; H304 Flam. Liq. 3; H226 Eye Irrit. 2; H319 Skin Irrit. 2; H315 Aquatic Acute 1; H400 Aquatic Chronic 1; H410	< 2,50	wt%
5	dodecanal			
	112-54-9 203-983-6 - 01-2119969441-33	Skin Sens. 1B; H317 Skin Irrit. 2; H315 Eye Irrit. 2; H319	< 0,50	wt%
6	pin-2(3)-ene			
	80-56-8 201-291-9 - 01-2119519223-49	Flam. Liq. 3; H226 Asp. Tox. 1; H304 Skin Irrit. 2; H315 Skin Sens. 1; H317 Acute Tox. 4; H302 Aquatic Chronic 1; H410 Aquatic Acute 1; H400	< 0,50	wt%

Full Text for all H-phrases and EUH-phrases: pls. see section 16

SECTION 4: First aid measures**4.1 Description of first aid measures****General information**

Remove contaminated clothing and shoes immediately, and launder thoroughly before reusing. In case of persisting adverse effects, consult a physician. In case of allergic symptoms, especially respiratory tract related, seek medical help immediately.

After inhalation

Remove affected persons from dangerous area by observing suitable respiratory protection measures. Ensure supply of fresh air. Irregular breathing/no breathing: artificial respiration.

After skin contact

In case of contact with skin wash off with water. Consult a doctor if skin irritation persists.

After eye contact

Remove contact lenses. Rinse eye thoroughly under running water keeping eyelids wide open and protecting the unaffected eye (at least 10 to 15 minutes).

After ingestion

Rinse mouth thoroughly with water. Do not induce vomiting - aspiration hazard. Never give anything by mouth to an unconscious person. Call a doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed**Effects**

In the case of swallowing with subsequent vomiting, aspiration of the lungs can occur which can lead to chemical pneumonia or asphyxiation.

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

SECTION 5: Firefighting measures

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5.1 Extinguishing media

Suitable extinguishing media

Water spray jet; Alcohol-resistant foam; Carbon dioxide; Dry chemical extinguisher

Unsuitable extinguishing media

High power water jet

5.2 Special hazards arising from the substance or mixture

In the event of fire, the following can be released: Carbon monoxide (CO); Carbon dioxide (CO₂); Vapours are heavier than air and may spread near ground to sources of ignition. May travel considerable distance to source of ignition and flash back.

5.3 Advice for firefighters

Use self-contained breathing apparatus. Wear full protective suit. Containers close to fire should be transferred to a safe place. Cool closed containers exposed to fire with water. Run-off water from fire fighting must not be discharged into drains or enter surface water.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Refer to protective measures listed in sections 7 and 8. Keep away from ignition sources.

For emergency responders

Personal protective equipment (PPE) - see section 8.

6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater. Do not discharge into the subsoil/soil. In case of entry into waterways, soil or drains, inform the responsible authorities.

6.3 Methods and material for containment and cleaning up

Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations (see section 13).

6.4 Reference to other sections

Information regarding safe handling, see section 7. Information regarding personal protective measures, see section 8. Information regarding waste disposal, see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling

Risks inherent to handling the product must be minimised by applying the appropriate protective and preventive measures. Working processes should - so far as possible, according to the state of the art - be designed to rule out bodily contact or the release of hazardous substances.

General protective and hygiene measures

Do not eat, drink or smoke during work time. Keep away from foodstuffs and beverages. Do not inhale vapours. Avoid contact with eyes and skin. Wash hands before breaks and after work. Remove contaminated clothing and shoes and launder thoroughly before reusing. Provide eye wash fountain in work area. Have emergency shower available.

Advice on protection against fire and explosion

Vapours can form an explosive mixture with air. Isolate from sources of heat, sparks and open flame. Take precautionary measures against electrostatic loading (earthing necessary during loading operations). Use explosion-proof equipment/fittings and non-sparking tools.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

Keep container tightly closed. Protect from heat and direct sunlight. Store in a dry place.

Recommended storage temperature

Value

Room temperature

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Requirements for storage rooms and vessels

Containers which are opened must be carefully closed and kept upright to prevent leakage. Always keep in containers of same material as the original.

Incompatible products

Substances to be avoided, see section 10.

7.3 Specific end use(s)

No data available.

SECTION 8: Exposure controls/personal protection**8.1 Control parameters****Occupational exposure limit values**

No	Substance name	CAS no.	EC no.
1	2-butoxyethanol	111-76-2	203-905-0
Occupational Exposure Limit Values (Schedule V, Occupational Health and Safety Authority Act)			
2-Butoxyethanol			
	WEL short-term (15 min reference period)	246	mg/m ³ 50 ml/m ³
	WEL long-term (8-hr TWA reference period)	98	mg/m ³ 20 ml/m ³
Occupational Exposure Limit Values (Schedule V, Occupational Health and Safety Authority Act)			
2-Butoxyethanol			
	WEL short-term (15 min reference period)	246	mg/m ³ 50 ppm
	WEL long-term (8-hr TWA reference period)	98	mg/m ³ 20 ppm
	Comments	Skin	
2000/39/EC			
2-Butoxyethanol			
	WEL short-term (15 min reference period)	246	mg/m ³ 50 ppm
	WEL long-term (8-hr TWA reference period)	98	mg/m ³ 20 ppm
	Skin resorption / sensibilisation	Skin	

DNEL, DMEL and PNEC values**DNEL values (worker)**

No	Substance name	CAS / EC no		
	Route of exposure	Exposure time	Effect	Value
1	2-butoxyethanol	111-76-2 203-905-0		
	dermal	Long term (chronic)	systemic	125,00 mg/kg/day
	dermal	Short term (acut)	systemic	89,00 mg/kg/day
	inhalative	Long term (chronic)	systemic	98,00 mg/m ³
	inhalative	Short term (acut)	systemic	1091,00 mg/m ³
	inhalative	Long term (chronic)	local	246,00 mg/m ³
2	Orange, sweet, ext.	8028-48-6 232-433-8		
	dermal	Long term (chronic)		8,89 mg/kg/day
	dermal	Short term (acut)		185,8 µg/cm ²
	inhalative			31,1 mg/m ³
3	citral	5392-40-5 226-394-6		
	dermal	Long term (chronic)	systemic	1,7 mg/kg/day
	dermal	Long term (chronic)	local	140 µg/cm ²
	inhalative	Long term (chronic)	systemic	9 mg/m ³
4	pin-2(3)-ene	80-56-8 201-291-9		
	dermal	Short term (acut)	local	161 µg/cm ²
	inhalative	Long term (chronic)	systemic	5,98 mg/m ³

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DNEL value (consumer)

No	Substance name			CAS / EC no	
	Route of exposure	Exposure time	Effect	Value	
1	2-butoxyethanol			111-76-2 203-905-0	
	oral	Long term (chronic)	systemic	6,30	mg/kg/day
	oral	Short term (acut)	systemic	26,70	mg/kg/day
	dermal	Long term (chronic)	systemic	75,00	mg/kg/day
	dermal	Short term (acut)	systemic	89,00	mg/kg/day
	inhalative	Long term (chronic)	systemic	59,00	mg/m ³
	inhalative	Short term (acut)	systemic	426,00	mg/m ³
	inhalative	Long term (chronic)	local	147,00	mg/m ³
2	Orange, sweet, ext.			8028-48-6 232-433-8	
	oral	Long term (chronic)		4,44	mg/kg/day
	dermal	Long term (chronic)		4,44	mg/kg/day
	dermal	Short term (acut)		92,9	µg/cm ²
	inhalative	Long term (chronic)		7,78	mg/m ³
3	citral			5392-40-5 226-394-6	
	oral	Long term (chronic)	systemic	0,6	mg/kg/day
	dermal	Long term (chronic)	systemic	1	mg/kg/day
	dermal	Long term (chronic)	local	140	µg/cm ²
	inhalative	Long term (chronic)	systemic	2,7	mg/m ³
	4	pin-2(3)-ene			80-56-8 201-291-9
oral		Long term (chronic)	systemic	0,31	mg/kg/day
dermal		Short term (acut)	local	81	µg/cm ²
inhalative		Long term (chronic)	systemic	1,06	mg/m ³

PNEC values

No	Substance name		CAS / EC no		
	ecological compartment	Type	Value		
1	2-butoxyethanol		111-76-2 203-905-0		
	water	fresh water	8,80	mg/L	
	water	marine water	0,88	mg/L	
	water	fresh water sediment	34,60	mg/kg	
	with reference to: dry weight				
	water	marine water sediment	3,46	mg/kg	
	water	Aqua intermittent	26,4	mg/L	
	soil	-	2,33	mg/kg dry weight	
	sewage treatment plant	-	463,00	mg/L	
	secondary poisoning	-	0,02	g/kg	
	2	Orange, sweet, ext.		8028-48-6 232-433-8	
water		fresh water	5,4	mg/L	
water		marine water	0,54	mg/L	
water		fresh water sediment	1,3	mg/kg dry weight	
water		marine water sediment	0,13	mg/kg dry weight	
water		Aqua intermittent	5,77	mg/L	
soil		-	0,261	mg/kg dry weight	
sewage treatment plant		-	2,1	mg/L	

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	secondary poisoning	-	13,3	mg/kg
	with reference to: food			
3	citral		5392-40-5 226-394-6	
	water	fresh water	0,007	mg/L
	water	marine water	0,001	mg/L
	water	Aqua intermittent	0,068	mg/L
	water	fresh water sediment	0,125	mg/kg dry weight
	water	marine water sediment	0,013	mg/kg dry weight
	soil	-	0,021	mg/kg dry weight
	sewage treatment plant	-	1,6	mg/L
4	pin-2(3)-ene		80-56-8 201-291-9	
	water	fresh water	4	µg/L
	water	marine water	0,4	µg/L
	water	fresh water sediment	1,033	mg/kg dry weight
	water	marine water sediment	0,103	mg/kg dry weight
	soil	-	0,539	mg/kg dry weight
	sewage treatment plant	-	3,26	mg/L
	secondary poisoning	-	1,35	mg/kg food

8.2 Exposure controls

Appropriate engineering controls

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL (=Occupational Exposure Limit), suitable respiratory protection must be worn.

Personal protective equipment

Respiratory protection

If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of aerosol and mist formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified. Filter A or environment-independent breathing apparatus.

Eye / face protection

Safety glasses with side protection shield (EN 166)

Hand protection

Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product. Before use, the protective gloves should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.

Appropriate Material	butyl rubber		
Material thickness	>=	0,5	mm
Breakthrough time	>	120	min

Other

Chemical-resistant work clothes.

Environmental exposure controls

No data available.

SECTION 9: Physical and chemical properties

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9.1 Information on basic physical and chemical properties

Form/Colour	
liquid	
light yellow	
Odour	
fruity	
Odour threshold	
No data available	
pH value	
Not applicable	
Boiling point / boiling range	
Value	> 35 °C
Melting point / melting range	
No data available	
Decomposition point / decomposition range	
No data available	
Flash point	
Value	> 45 °C
Auto-ignition temperature	
No data available	
Oxidising properties	
No data available	
Explosive properties	
No data available	
Flammability (solid, gas)	
No data available	
Lower flammability or explosive limits	
No data available	
Upper flammability or explosive limits	
No data available	
Vapour pressure	
No data available	
Vapour density	
No data available	
Evaporation rate	
No data available	
Relative density	
No data available	
Density	
Value	0,87 g/cm ³
Reference temperature	20 °C
Solubility in water	
Comments	miscible
Solubility(ies)	
No data available	

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Partition coefficient: n-octanol/water			
No	Substance name	CAS no.	EC no.
1	2-butoxyethanol	111-76-2	203-905-0
log Pow			0,81
Reference temperature			25 °C
Source		ECHA	
2	Orange, sweet, ext.	8028-48-6	232-433-8
log Pow		>=	4
3	citral	5392-40-5	226-394-6
log Pow			2,76
Reference temperature			25 °C
Method		OECD 107	
Source		ECHA	
Viscosity			
Value		< 7	mm ² /s
Reference temperature		40	°C
Type		kinematic	

9.2 Other information

Other information
No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available.

10.2 Chemical stability

Stable under recommended storage and handling conditions (See section 7).

10.3 Possibility of hazardous reactions

Dangerous reactions are not to be expected when handling product according to its intended use.

10.4 Conditions to avoid

Heat, naked flames and other ignition sources. Static discharges.

10.5 Incompatible materials

strong oxidizing agents; light metals

10.6 Hazardous decomposition products

No hazardous decomposition products known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute oral toxicity (result of the ATE calculation for the mixture)	
No	Product Name
1	Duftstoff Citrone
Comments	The result of the applied calculation method according to the European Regulation (EC) 1272/2008 (CLP), Paragraph 3.1.3.6, Part 3 of Annex I is outside the values that imply a classification / labelling of this mixture according to table 3.1.1 defining the respective categories (ATE oral > 2000 mg/kg).

Acute oral toxicity			
No	Substance name	CAS no.	EC no.
1	2-butoxyethanol	111-76-2	203-905-0
LD50		1746	mg/kg bodyweight

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Species	rat		
Method	OECD 401		
Source	ECHA		
2	Orange, sweet, ext.	8028-48-6	232-433-8
LD50	>	5000	mg/kg bodyweight
Species	rat		
3	citral	5392-40-5	226-394-6
LD50	appr.	6800	mg/kg bodyweight
Species	rat		
Method	BASF-Test		
Source	ECHA		
4	7-methyl-3-methyleneocta-1,6-diene	123-35-3	204-622-5
LD50	>	3380	mg/kg bodyweight
Species	rat		
Method	Approximate lethal dose method (Deichmann WB and LeBlanc TJ, 1943		
Source	ECHA		

Acute dermal toxicity (result of the ATE calculation for the mixture)

No	Product Name		
1	Duftstoff Citrone		
Comments		The result of the applied calculation method according to the European Regulation (EC) 1272/2008 (CLP), Paragraph 3.1.3.6, Part 3 of Annex I is outside the values that imply a classification / labelling of this mixture according to table 3.1.1 defining the respective categories (ATE dermal > 2000 mg/kg).	

Acute dermal toxicity

No	Substance name	CAS no.	EC no.
1	2-butoxyethanol	111-76-2	203-905-0
LD50	>	2000	mg/kg bodyweight
Species	guinea pig		
Method	OECD 402		
Source	ECHA		
2	Orange, sweet, ext.	8028-48-6	232-433-8
LD50	>	5000	mg/kg bodyweight
Species	rabbit		
3	citral	5392-40-5	226-394-6
LD50	>	2000	mg/kg bodyweight
Species	rabbit		
Method	BASF-Test		
Source	ECHA		
4	7-methyl-3-methyleneocta-1,6-diene	123-35-3	204-622-5
LD50	>	5000	mg/kg bodyweight
Species	rabbit		
Method	OECD 402		
Source	ECHA		

Acute inhalational toxicity (result of the ATE calculation for the mixture)

No	Product Name		
1	Duftstoff Citrone		
ATE (Mixture)		3,0000	mg/l
Route of exposure / physical form		Dust/mist	
Method		Calculation method according Regulation (EC) No 1272/2008, (CLP), annex I, part 3, section 3.1.3.6.	

Acute inhalational toxicity

No	Substance name	CAS no.	EC no.
1	2-butoxyethanol	111-76-2	203-905-0

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ATE	1,5	mg/l
Duration of exposure	4	h
State of aggregation	Dust/mist	
Species	rat	

Skin corrosion/irritation			
No	Substance name	CAS no.	EC no.
1	2-butoxyethanol	111-76-2	203-905-0
Duration of exposure		4	h
Species		rabbit	
Method		EU B.4	
Source		ECHA	
Evaluation		irritant	
2	7-methyl-3-methyleneocta-1,6-diene	123-35-3	204-622-5
Species		Human	
Method		ECVAM protocol version 1.8 of february 2009	
Source		ECHA	
Evaluation		irritant	
Evaluation/classification		Based on available data, the classification criteria are met.	

Serious eye damage/irritation			
No	Substance name	CAS no.	EC no.
1	2-butoxyethanol	111-76-2	203-905-0
Duration of exposure		24	h
Species		rabbit	
Method		OECD 405	
Source		ECHA	
Evaluation		Irritating to eyes	
2	Orange, sweet, ext.	8028-48-6	232-433-8
Species		rabbit	
Method		OECD 405	
Evaluation		non-irritant	
3	citral	5392-40-5	226-394-6
Species		rabbit	
Method		OECD 405	
Source		ECHA	
Evaluation		irritant	
4	7-methyl-3-methyleneocta-1,6-diene	123-35-3	204-622-5
Species		rabbit	
Method		OECD 405	
Source		ECHA	
Evaluation		Irritating to eyes	
Evaluation/classification		Based on available data, the classification criteria are met.	

Respiratory or skin sensitisation			
No	Substance name	CAS no.	EC no.
1	2-butoxyethanol	111-76-2	203-905-0
Route of exposure		Skin	
Species		guinea pig	
Method		OECD 406	
Source		ECHA	
Evaluation		non-sensitizing	
2	citral	5392-40-5	226-394-6
Route of exposure		Skin	
Species		guinea pig	
Method		OECD 406	
Source		ECHA	
Evaluation		non-sensitizing	
3	7-methyl-3-methyleneocta-1,6-diene	123-35-3	204-622-5

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Route of exposure	Skin
Species	mouse
Method	OECD 429
Source	ECHA
Evaluation	non-sensitizing
Evaluation/classification	Based on available data, the classification criteria are met.

Germ cell mutagenicity			
No	Substance name	CAS no.	EC no.
1	2-butoxyethanol	111-76-2	203-905-0
Method		OECD 471	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	
2	citral	5392-40-5	226-394-6
Method		OECD 471	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	
3	7-methyl-3-methyleneocta-1,6-diene	123-35-3	204-622-5
Type of examination		Bacterial Reverse Mutation Test	
Species		Salmonella typhimurium TA98, TA100, TA1535, TA1537	
Method		OECD 471	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are met.	
Route of exposure		oral	
Type of examination		In vivo mammalian somatic cell study: cytogenicity / erythrocyte micronucleus	
Species		mouse	
Method		OECD 474	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	

Reproduction toxicity			
No	Substance name	CAS no.	EC no.
1	citral	5392-40-5	226-394-6
Method		OECD 414	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	
2	7-methyl-3-methyleneocta-1,6-diene	123-35-3	204-622-5
Route of exposure		oral	
Species		rat	
Method		OECD 415	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	

Carcinogenicity			
No	Substance name	CAS no.	EC no.
1	2-butoxyethanol	111-76-2	203-905-0
Species		rat	
Method		OECD 451	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	
2	citral	5392-40-5	226-394-6
Method		OECD 453	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	

STOT - single exposure
No data available

STOT - repeated exposure

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No	Substance name	CAS no.	EC no.
1	7-methyl-3-methyleneocta-1,6-diene	123-35-3	204-622-5
Route of exposure		oral	
Species		rat	
Method		OECD 408	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	

Aspiration hazard	
No data available	

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish (acute)			
No	Substance name	CAS no.	EC no.
1	2-butoxyethanol	111-76-2	203-905-0
LC50		>	1474 mg/l
Duration of exposure			96 h
Species		Oncorhynchus mykiss	
Method		OECD 203	
Source		ECHA	
2	Orange, sweet, ext.	8028-48-6	232-433-8
LC50			0,7 mg/l
Duration of exposure			96 h
Species		Pimephales promelas	
Method		OECD 203	
3	citral	5392-40-5	226-394-6
LC50			6,78 mg/l
Duration of exposure			96 h
Species		Leuciscus idus	
Method		DIN 38412	
Source		ECHA	

Toxicity to fish (chronic)			
No	Substance name	CAS no.	EC no.
1	2-butoxyethanol	111-76-2	203-905-0
NOEC		>	100 mg/l
Duration of exposure			21 day(s)
Species		Danio rerio	
Method		OECD 204	
Source		ECHA	

Toxicity to Daphnia (acute)			
No	Substance name	CAS no.	EC no.
1	2-butoxyethanol	111-76-2	203-905-0
EC50			1550 mg/l
Duration of exposure			48 h
Species		Daphnia magna	
Method		OECD 202	
Source		ECHA	
2	Orange, sweet, ext.	8028-48-6	232-433-8
EC50			0,67 mg/l
Duration of exposure			48 h
Species		Daphnia magna	
Source		OECD 202	
3	citral	5392-40-5	226-394-6
EC50			6,8 mg/l
Duration of exposure			48 h

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Species	Daphnia magna		
Method	79/831/EEC		
Source	ECHA		
4	7-methyl-3-methyleneocta-1,6-diene	123-35-3	204-622-5
EC50		1,47	mg/l
Duration of exposure		48	h
Species	Daphnia magna		
Method	OECD 202		
Source	ECHA		

Toxicity to Daphnia (chronic)			
No	Substance name	CAS no.	EC no.
1	2-butoxyethanol	111-76-2	203-905-0
NOEC		100	mg/l
Duration of exposure		21	day(s)
Species	Daphnia magna		
Method	OECD 211		
Source	ECHA		

Toxicity to algae (acute)			
No	Substance name	CAS no.	EC no.
1	2-butoxyethanol	111-76-2	203-905-0
EC50		911	mg/l
Duration of exposure		72	h
Species	Pseudokirchneriella subcapitata		
Method	OECD 201		
Source	ECHA		
2	Orange, sweet, ext.	8028-48-6	232-433-8
ErC50		150	mg/l
Duration of exposure		72	h
Species	Desmodesmus subspicatus		
Method	OECD 201		
3	citral	5392-40-5	226-394-6
EC50		103,8	mg/l
Duration of exposure		72	h
Species	Desmodesmus subspicatus		
Method	DIN 38412		
Source	ECHA		
4	7-methyl-3-methyleneocta-1,6-diene	123-35-3	204-622-5
EC50		0,342	mg/l
Duration of exposure		72	h
Species	Pseudokirchneriella subcapitata		
Source	OECD 201		

Toxicity to algae (chronic)	
No data available	

Bacteria toxicity	
No data available	

12.2 Persistence and degradability

Biodegradability			
No	Substance name	CAS no.	EC no.
1	2-butoxyethanol	111-76-2	203-905-0
Type	aerobic biodegradation		
Value		90,4	%
Duration		28	day(s)
Method	OECD 301 B		
Source	ECHA		
Evaluation	readily biodegradable		

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2	Orange, sweet, ext.	8028-48-6	232-433-8
Value		72	83,4 %
Duration			28 day(s)
Method	OECD 301 B		
Evaluation	readily biodegradable		
3	citral	5392-40-5	226-394-6
Type	BSB		
Value		>	90 %
Duration			28 day(s)
Method	92/69/EEC, C.4-C		
Source	ECHA		

12.3 Bioaccumulative potential

Bioconcentration factor (BCF)			
No	Substance name	CAS no.	EC no.
1	Orange, sweet, ext.	8028-48-6	232-433-8
BCF		32	156

Partition coefficient: n-octanol/water			
No	Substance name	CAS no.	EC no.
1	2-butoxyethanol	111-76-2	203-905-0
log Pow			0,81
Reference temperature			25 °C
Source	ECHA		
2	Orange, sweet, ext.	8028-48-6	232-433-8
log Pow		>=	4
3	citral	5392-40-5	226-394-6
log Pow			2,76
Reference temperature			25 °C
Method	OECD 107		
Source	ECHA		

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	
PBT assessment	According to the information provided in the supply chain, the mixture does not contain > 0.1% of a substance that is considered to be PBT.
vPvB assessment	According to the information provided in the supply chain, the mixture does not contain > 0.1% of a substance that is considered to be vPvB.

12.6 Other adverse effects

No data available.

12.7 Other information

Other information
Do not let enter the product into drains or waterways and do not store on public depositories.

SECTION 13: Disposal considerations**13.1 Waste treatment methods**

Product

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Disposal of the product should be carried out in accordance with all applicable regulations following consultation with the responsible local authority and the disposal company in an authorised and suitable disposal facility. Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

Packaging

Residuals must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.

SECTION 14: Transport information**14.1 Transport ADR/RID/ADN**

Class	3
Classification code	F1
Packing group	III
UN number	UN1266
Proper shipping name	PERFUMERY PRODUCTS
Tunnel restriction code	E
Label	3
Environmentally hazardous substance mark	Symbol "fish and tree"

14.2 Transport IMDG

Class	3
Packing group	III
UN number	UN1266
Proper shipping name	PERFUMERY PRODUCTS
Technical name	Orange, sweet, ext.
EmS	F-E, S-D
Label	3
Marine pollutant mark	Symbol "fish and tree"

14.3 Transport ICAO-TI / IATA

Class	3
Packing group	III
UN number	UN1266
Proper shipping name	Perfumery products
Label	3

14.4 Other information

No data available.

14.5 Environmental hazards

Information on environmental hazards, if relevant, please see 14.1 - 14.3.

14.6 Special precautions for user

No data available.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not relevant

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulations****Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)**

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances considered as substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006.

Trade name: Duftstoff Citrone**Product no.:** 167999**Current version :** 1.0.0, issued: 26.11.2020**Replaced version:** -, issued: -**Region:** MT**REACH candidate list of substances of very high concern (SVHC) for authorisation**

According to available data and the information provided by preliminary suppliers, the product does not contain substances that are considered substances meeting the criteria for inclusion in annex XIV (List of Substances Subject to Authorisation) as laid down in Article 57 and article 59 of REACH (EC) 1907/2006.

Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, MIXTURES AND ARTICLES

The product is considered being subject to REACH regulation (EC) 1907/2006 annex XVII.	No 3, 40
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Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances

This product is subject to Part I of Annex I, risk category:	E1, P5c
If the properties of the substance/product give rise to more than one classification, for the purposes of 2012/18/UE, the lowest qualifying quantities set out in Part 1 and Part 2 of Annex I shall apply.	

Other regulations

Adhere to the national sanitary and occupational safety regulations when using this product.
Employment restrictions, according to the regulations for protection of expectant and nursing mothers and the youth health and safety regulations, serving to protect against hazardous materials, should be observed.

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out for this mixture.

SECTION 16: Other information**Sources of key data used to compile the data sheet:**

Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.

Directives 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164.

National Threshold Limit Values of the corresponding countries as amended in each case.

Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.

The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding section.

Full text of the H- and EUH- phrases drawn up in sections 2 and 3 (provided not already drawn up in these sections)

H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H400	Very toxic to aquatic life.

Creation of the safety data sheet

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This information is based on our present knowledge and experience.

The safety data sheet describes products with a view to safety requirements.

It does not however, constitute a guarantee for any specific product properties and shall not establish a legally valid contractual relationship.

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