

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Sonnencreme: gemäß PV 3964/ GS 94011/ AA-0053 (AA-P 257) Rezeptur Nr. 396/001/003

Revision date: 08.01.2025

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

Sonnencreme: gemäß PV 3964/ GS 94011/ AA-0053 (AA-P 257) Rezeptur Nr. 396/001/003

Further trade names

Product code: VW-PM005/ TO-PM003/ BMW-PM001

1.2. Relevant identified uses of the substance or mixture and uses advised against**Use of the substance/mixture**

Test substance

Uses advised against

Any non-intended use.

1.3. Details of the supplier of the safety data sheet

Company name:	Thierry GmbH	
Street:	Motorstrasse 30	
Place:	D-70499 Stuttgart	
Telephone:	+49 (0)711 8399 7470	Telefax: +49 (0)711 8399 7480
E-mail:	info@thierry-gmbh.de	
Contact person:	Veronika Krieger	Telephone: 0711/839974-0
Internet:	www.thierry-gmbh.de	

1.4. Emergency telephone number:

Emergency medical information: Poison Information Center Mainz - Tel: +49 (6131) 19240

Further Information

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (amended by Regulation (EU) No 2020/878)

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Regulation (EC) No 1272/2008**Repr. 2; H361d
Aquatic Chronic 2; H411

Full text of hazard statements: see SECTION 16.

2.2. Label elements**Regulation (EC) No 1272/2008****Hazard components for labelling**

Ethyl hexyl salicylate

Signal word: Warning**Pictograms:****Hazard statements**H361d Suspected of damaging the unborn child.
H411 Toxic to aquatic life with long lasting effects.**Precautionary statements**P201 Obtain special instructions before use.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing and eye protection/face protection.
P308+P313 IF exposed or concerned: Get medical advice/attention.

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P391 Collect spillage.
P501 Dispose of contents/container to local/regional/national/international regulations.

Special labelling of certain mixtures

EUH208 Contains 3,7,11,15-tetramethylhexadecane-1,2,3-triol. May produce an allergic reaction.

2.3. Other hazards

The mixture contains the following substances fulfilling the PBT criteria according to REACH, annex XIII: 1-[4-(1,1-dimethylethyl)phenyl]-3-(4-methoxyphenyl)propane-1,3-dione.

Endocrine disrupting properties: (±)-1,7,7-trimethyl-3-[(4-methylphenyl)methylene]bicyclo[2.2.1]heptan-2-one; 1-[4-(1,1-dimethylethyl)phenyl]-3-(4-methoxyphenyl)propane-1,3-dione.

2-Ethylhexyl-2-cyano-3,3-diphenyl-2-propenoate The substance is suspected to fulfil the PBT criteria. The substance is listed in the PBT assessment list, but the assessment is still ongoing (ECHA).

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Relevant ingredients

CAS No	Chemical name	Quantity
	EC No	Index No
	REACH No	
	Classification (Regulation (EC) No 1272/2008)	
64-17-5	ethanol; ethyl alcohol	10 - < 12 %
	200-578-6	603-002-00-5
	01-2119457610-43	
	Flam. Liq. 2, Eye Irrit. 2; H225 H319	
118-60-5	Ethyl hexyl salicylate	5 - < 7 %
	204-263-4	01-2119978235-29
	Repr. 2, Aquatic Chronic 1; H361d H410	
36861-47-9	(±)-1,7,7-trimethyl-3-[(4-methylphenyl)methylene]bicyclo[2.2.1]heptan-2-one	3 - < 5 %
	253-242-6	
	Aquatic Acute 1, Aquatic Chronic 1; H400 H410	
70356-09-1	1-[4-(1,1-dimethylethyl)phenyl]-3-(4-methoxyphenyl)propane-1,3-dione	1 - < 3 %
	274-581-6	01-2119967408-25
6197-30-4	2-Ethylhexyl-2-cyano-3,3-diphenyl-2-propenoate	1 - < 3 %
	228-250-8	01-2119457637-27
	Repr. 2, Aquatic Chronic 1; H361f H410	
74563-64-7	3,7,11,15-tetramethylhexadecane-1,2,3-triol	0.1 - < 0.2 %
	277-923-2	
	Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1, Aquatic Chronic 4; H315 H319 H317 H413	

Full text of H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
		Specific Conc. Limits, M-factors and ATE	
64-17-5	200-578-6	ethanol; ethyl alcohol	10 - < 12 %
		inhalation: LC50 = 124,7 mg/l (vapours); oral: LD50 = 10470 mg/kg Eye Irrit. 2; H319: >= 50 - 100	
118-60-5	204-263-4	Ethyl hexyl salicylate	5 - < 7 %
		dermal: LD50 = > 5000 mg/kg; oral: LD50 = > 5000 mg/kg Aquatic Chronic 1; H410: M=1	
70356-09-1	274-581-6	1-[4-(1,1-dimethylethyl)phenyl]-3-(4-methoxyphenyl)propane-1,3-dione	1 - < 3 %
		oral: LD50 = > 16000 mg/kg	

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6197-30-4	228-250-8	2-Ethylhexyl-2-cyano-3,3-diphenyl-2-propenoate	1 - < 3 %
		dermal: LD50 = > 2000 mg/kg; oral: LD50 = > 5000 mg/kg Aquatic Chronic 1; H410: M=10	
74563-64-7	277-923-2	3,7,11,15-tetramethylhexadecane-1,2,3-triol	0.1 - < 0.2 %
		oral: LD50 = >5000 mg/kg	

Further Information

(±)-1,7,7-trimethyl-3-[(4-methylphenyl)methylene]bicyclo[2.2.1]heptan-2-one: This substance has been listed as SVHC (substance of very high concern) in the Candidate List according to Article 59 of REACH.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

After inhalation

In case of accident by inhalation: remove casualty to fresh air and keep at rest. In case of respiratory tract irritation, consult a physician.

After contact with skin

Gently wash with plenty of soap and water. In case of skin irritation, seek medical treatment.

After contact with eyes

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. In case of troubles or persistent symptoms, consult an ophthalmologist.

After ingestion

Rinse mouth thoroughly with water. Let water be drunken in little sips (dilution effect). Do NOT induce vomiting. In all cases of doubt, or when symptoms persist, seek medical advice.

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

See sections 2 and 11

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO₂). Dry extinguishing powder. Alcohol resistant foam. Water spray

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

In case of fire may be liberated: Carbon monoxide (CO). Carbon dioxide (CO₂). Nitrogen oxides (NO_x)

5.3. Advice for firefighters

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

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Co-ordinate fire-fighting measures to the fire surroundings.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Provide adequate ventilation.

Avoid exposure. Do not breathe vapour/aerosol. Avoid contact with skin, eyes and clothes.

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Wear personal protection equipment (refer to section 8).

For non-emergency personnel

Wear personal protection equipment (refer to section 8).

For emergency responders

No special measures are necessary.

6.2. Environmental precautions

Discharge into the environment must be avoided. Prevent spread over a wide area (e.g. by containment or oil barriers). In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

6.3. Methods and material for containment and cleaning up**For containment**

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).

Treat the recovered material as prescribed in the section on waste disposal.

For cleaning up

Clean contaminated objects and areas thoroughly observing environmental regulations.

Other information

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).

Treat the recovered material as prescribed in the section on waste disposal.

Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

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

Provide adequate ventilation.

Avoid exposure - obtain special instructions before use.

Wear suitable protective clothing. (See section 8.)

Advice on protection against fire and explosion

Usual measures for fire prevention.

Advice on general occupational hygiene

Always close containers tightly after the removal of product. When using do not eat, drink or smoke. Wash hands before breaks and after work. Take off contaminated clothing and wash it before reuse. Street clothing should be stored separately from work clothing. Contaminated work clothing should not be allowed out of the workplace.

Further information on handling

Avoid contact with skin, eyes and clothes.

General protection and hygiene measures: refer to section 8

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

Keep container tightly closed in a cool, well-ventilated place. Keep/Store only in original container.

Make sure spills can be contained, e.g. in sump pallets or kerbed areas.

Hints on joint storage

Do not store together with: Explosives. Oxidizing solids. Oxidizing liquids. Radioactive substances. Infectious substances. Food and animal feedingstuff.

Further information on storage conditions

Keep the packing dry and well sealed to prevent contamination and absorption of humidity.

Recommended storage temperature: 20 °C

Protect against: frost. UV-radiation/sunlight. heat. Humidity

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7.3. Specific end use(s)

See section 1.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

DNEL/DMEL values

CAS No	Name of agent	Exposure route	Effect	Value
64-17-5	ethanol; ethyl alcohol			
Worker DNEL, long-term		inhalation	systemic	380 mg/m ³
Worker DNEL, acute		inhalation	local	1900 mg/m ³
Worker DNEL, long-term		dermal	systemic	343 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	114 mg/m ³
Consumer DNEL, acute		inhalation	local	950 mg/m ³
Consumer DNEL, long-term		dermal	systemic	206 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	87 mg/kg bw/day
118-60-5	Ethyl hexyl salicylate			
Worker DNEL, long-term		inhalation	systemic	11,7 mg/m ³
Worker DNEL, long-term		dermal	systemic	50 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	2,89 mg/m ³
Consumer DNEL, long-term		dermal	systemic	25 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	0,83 mg/kg bw/day
70356-09-1	1-[4-(1,1-dimethylethyl)phenyl]-3-(4-methoxyphenyl)propane-1,3-dione			
Worker DNEL, long-term		inhalation	systemic	39,38 mg/m ³
Worker DNEL, acute		inhalation	systemic	2520 mg/m ³
Worker DNEL, long-term		dermal	systemic	6,49 mg/kg bw/day
Consumer DNEL, long-term		dermal	systemic	2,25 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	2,25 mg/kg bw/day
6197-30-4	2-Ethylhexyl-2-cyano-3,3-diphenyl-2-propenoate			
Worker DNEL, long-term		inhalation	systemic	5,4 mg/m ³
Consumer DNEL, long-term		inhalation	systemic	1,3 mg/m ³
Consumer DNEL, long-term		dermal	systemic	382,5 mg/kg bw/day
Worker DNEL, long-term		dermal	systemic	765 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	0,8 mg/kg bw/day

PNEC values

CAS No	Name of agent	Environmental compartment	Value
64-17-5	ethanol; ethyl alcohol		
		Freshwater	0,96 mg/l
		Freshwater (intermittent releases)	2,75 mg/l

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Marine water	0,79 mg/l
Freshwater sediment	3,6 mg/kg
Marine sediment	2,9 mg/kg
Secondary poisoning	380 mg/kg
Micro-organisms in sewage treatment plants (STP)	580 mg/l
Soil	0,63 mg/kg
118-60-5	Ethyl hexyl salicylate
Freshwater	0,00082 mg/l
Marine water	0,000082 mg/l
70356-09-1	1-[4-(1,1-dimethylethyl)phenyl]-3-(4-methoxyphenyl)propane-1,3-dione
Freshwater	0.027 mg/l
Marine water	0.027 mg/l
Freshwater sediment	11,96 mg/kg
Marine sediment	11,96 mg/kg
Secondary poisoning	100 mg/kg
Micro-organisms in sewage treatment plants (STP)	100 mg/l
Soil	2,384 mg/kg
6197-30-4	2-Ethylhexyl-2-cyano-3,3-diphenyl-2-propenoate
Freshwater	0,000266 mg/l
Freshwater (intermittent releases)	0,04 mg/l
Marine water	0,000027 mg/l
Freshwater sediment	1,302 mg/kg
Marine sediment	0,13 mg/kg
Micro-organisms in sewage treatment plants (STP)	10 mg/l
Soil	1,25 mg/kg

Additional advice on limit values

To date, no national critical limit values exist.

8.2. Exposure controls



Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment.

Provide adequate ventilation.

Individual protection measures, such as personal protective equipment

Eye/face protection

Recommended eye protection articles: Eye glasses EN ISO 16321-1:2022

Hand protection

Wear suitable gloves.

Suitable material:

Butyl rubber. - Thickness of glove material: 0,5 mm

Breakthrough time \geq 8 h

The selected protective gloves have to satisfy the specifications of EU Directive EC/ 2016/425 and the standard EN 374 derived from it.

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Check leak tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well.

For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Skin protection

Suitable protective clothing: Lab apron.

Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required.

Respiratory protection necessary at:

- Exceeding exposure limit values
- Insufficient ventilation and aerosol or mist formation

Suitable respiratory protection apparatus: Combination filtering device (EN 14387) Type: A - P2

The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.

Environmental exposure controls

Do not allow uncontrolled discharge of product into the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid	
Colour:	cream	
Odour:	characteristic	
Odour threshold:	not determined	
Melting point/freezing point:		not determined
Boiling point or initial boiling point and boiling range:		not determined
Flammability:		not determined
Lower explosion limits:		not determined
Upper explosion limits:		not determined
Flash point:		not determined
Auto-ignition temperature:		not determined
Decomposition temperature:		not determined
pH-Value:		not determined
Viscosity / kinematic:		not determined
Water solubility:		not determined
Solubility in other solvents		not determined
Dissolution rate:		not relevant
Partition coefficient n-octanol/water:		SECTION 12: Ecological information
Dispersion stability:		not relevant
Vapour pressure:		not determined
Density (at 20 °C):		1,02 g/cm ³
Bulk density:		not relevant
Relative vapour density:		not determined
Particle characteristics:		not relevant

9.2. Other information

Information with regard to physical hazard classes

Explosive properties

none

Sustaining combustion:

Not sustaining combustion

Self-ignition temperature

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Solid:	not relevant
Gas:	not determined
Oxidizing properties	
none	

Other safety characteristics

Evaporation rate:	not determined
Solvent separation test:	not determined
Solvent content:	not determined
Solid content:	not determined
Sublimation point:	not determined
Softening point:	not determined
Pour point:	not determined
Viscosity / dynamic: (at 20 °C)	2038 mPa·s
Flow time:	not determined

Further Information

No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

No information available.

10.4. Conditions to avoid

Protect against: UV-radiation/sunlight. heat.

10.5. Incompatible materials

Materials to avoid: Oxidising agent, strong. Reducing agents, strong.

10.6. Hazardous decomposition products

In case of fire may be liberated: Carbon monoxide, Carbon dioxide (CO₂). Nitrogen oxides (NO_x)

SECTION 11: Toxicological information

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

Toxicokinetics, metabolism and distribution

No data available.

Acute toxicity

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

ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

CAS No	Chemical name					
	Exposure route	Dose	Species	Source	Method	
64-17-5	ethanol; ethyl alcohol					
	oral	LD50 mg/kg	10470	Rat	REACH Dossier	OECD Guideline 401
	inhalation (4 h) vapour	LC50 mg/l	124,7	Rat	REACH Dossier	OECD Guideline 403

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118-60-5	Ethyl hexyl salicylate				
	oral	LD50 mg/kg	> 5000	Rat	REACH Dossier OECD Guideline 401
	dermal	LD50 mg/kg	> 5000	Rat	REACH Dossier OECD Guideline 402
70356-09-1	1-[4-(1,1-dimethylethyl)phenyl]-3-(4-methoxyphenyl)propane-1,3-dione				
	oral	LD50 mg/kg	> 16000	Rat	REACH Dossier
6197-30-4	2-Ethylhexyl-2-cyano-3,3-diphenyl-2-propenoate				
	oral	LD50 mg/kg	> 5000	Rat	Study report (1993) OECD Guideline 401
	dermal	LD50 mg/kg	> 2000	Rat	Study report (1992) OECD Guideline 402
74563-64-7	3,7,11,15-tetramethylhexadecane-1,2,3-triol				
	oral	LD50 mg/kg	>5000	Rat	MSDS external

Irritation and corrosivity

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation: Based on available data, the classification criteria are not met.

Sensitising effects

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

Contains 3,7,11,15-tetramethylhexadecane-1,2,3-triol. May produce an allergic reaction.

Carcinogenic/mutagenic/toxic effects for reproduction

Suspected of damaging the unborn child. (Ethyl hexyl salicylate)

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

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

Ethanol. (CAS-No.: 64-17-5):

In-vitro mutagenicity: No experimental indications of mutagenicity in-vivo exist.

Reproductive toxicity:

Exposure time: 18 weeks

Species: CD-1 Mouse.

Method: OECD Guideline 416

Result: NOAEL = 20700 mg/kg/day

Developmental toxicity/teratogenicity:

Exposure time: 19d

Species: Sprague-Dawley Rat.

Method: OECD Guideline 414

Result: NOAEL = 16000 ppm (maternal toxicity)

Result: NOAEL >= 20000 ppm (teratogenicity)

Literature information: REACH Dossier

2-Ethylhexyl-2-cyano-3,3-diphenyl-2-propenoate (CAS-No.: 6197-30-4):

In-vitro mutagenicity: No experimental indications of mutagenicity in-vivo exist.

Developmental toxicity/teratogenicity:

Method: OECD Guideline 414 (Prenatal Developmental Toxicity Study)

Species: Rat.

Exposure time: 20d

Result: NOAEL = 1000 mg/kg(bw)/day

Literature information: REACH Dossier

2-Ethylhexyl salicylate (CAS-No.: 118-60-5):

In-vitro mutagenicity: No experimental indications of mutagenicity in-vivo exist.

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Developmental toxicity/teratogenicity:

Method: OECD guideline 421 (Reproduction / Developmental Toxicity Screening Test)

Species: Rat.

Exposure time: 7 weeks

Result: NOAEL = 80 mg/kg(bw)/day

Literature information: REACH Dossier

1-[4-(1,1-dimethylethyl)phenyl]-3-(4-methoxyphenyl)propane-1,3-dione (CAS-No.: 70356-09-1):

In vivo mutagenicity/genotoxicity: No experimental indications of in vivo mutagenicity exist.

Method:

Developmental toxicity/teratogenicity:

Method: OECD Guideline 414 (Prenatal Developmental Toxicity Study)

Species: Rat.

Exposure time: 20d

Result: NOAEL = 1000 mg/kg(bw)/day

Literature information: REACH Dossier

STOT-single exposure

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

STOT-repeated exposure

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

Ethanol. (CAS-No.: 64-17-5):

Subchronic oral toxicity

Exposure time: 90d

Species: Sprague-Dawley Rat.

Method: OECD Guideline 408

Result: NOAEL = 1280 mg/kg

Literature information: REACH Dossier

2-Ethylhexyl-2-cyano-3,3-diphenyl-2-propenoate (CAS-No.: 6197-30-4):

Subchronic oral toxicity:

Method: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)

Species: Rat.

Exposure time: 90d

Result: NOAEL = 175 mg/kg(bw)/day

Literature information: REACH Dossier

1-[4-(1,1-dimethylethyl)phenyl]-3-(4-methoxyphenyl)propane-1,3-dione (CAS-No.: 70356-09-1):

Subchronic oral toxicity

Developmental toxicity/teratogenicity:

Method: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)

Species: Rat.

Exposure time: 90d

Result: NOAEL = 450 mg/kg(bw)/day

Literature information: REACH Dossier

Aspiration hazard

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

Specific effects in experiment on an animal

No data available.

11.2. Information on other hazards**Endocrine disrupting properties**

Endocrine disrupting properties: (±)-1,7,7-trimethyl-3-[(4-methylphenyl)methylene]bicyclo[2.2.1]heptan-2-one;

1-[4-(1,1-dimethylethyl)phenyl]-3-(4-methoxyphenyl)propane-1,3-dione.

Other information

No data available.

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SECTION 12: Ecological information

12.1. Toxicity

Toxic to aquatic life with long lasting effects.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
64-17-5	ethanol; ethyl alcohol					
	Acute fish toxicity	LC50 mg/l	15400	96 h	Lepomis macrochirus	REACH Dossier EPA-660/3-75-009, 1975
	Acute algae toxicity	ErC50 mg/l	ca. 22000	96 h	Raphidocelis subcapitata	REACH Dossier OECD Guideline 201
	Acute crustacea toxicity	EC50 mg/l	> 10000	48 h	Daphnia magna	REACH Dossier DIN 38412 part 11
	Fish toxicity	NOEC mg/l	> 79	100 d	Oryzias latipes	REACH Dossier
	Algae toxicity	NOEC mg/l	5400	5 d	Skeletonema costatum	REACH Dossier
	Crustacea toxicity	NOEC	2 mg/l	10 d	Ceriodaphnia dubia	REACH Dossier
118-60-5	Ethyl hexyl salicylate					
	Acute fish toxicity	LC50 mg/l	> 82	96 h	Brachydanio rerio	REACH Dossier OECD Guideline 203
	Acute algae toxicity	ErC50 mg/l	> 11	72 h	Raphidocelis subcapitata	REACH Dossier OECD Guideline 20
	Acute crustacea toxicity	EC50	10 mg/l	48 h	Daphnia magna	REACH Dossier EU Method C.2
	Algae toxicity	NOEC mg/l	>= 11	3 d	Raphidocelis subcapitata	REACH Dossier OECD Guideline 20
	Crustacea toxicity	NOEC mg/l	0,008	21 d	Daphnia magna	REACH Dossier OECD Guideline 211
	Acute bacteria toxicity	EC50 mg/l ()	> 10000		Activated sludge	REACH Dossier ISO 8192
70356-09-1	1-[4-(1,1-dimethylethyl)phenyl]-3-(4-methoxyphenyl)propane-1,3-dione					
	Acute fish toxicity	LC50 (LL50) mg/l	>100	96 h	Cyprinus carpio	REACH Dossier
	Acute algae toxicity	ErC50 (LL50) mg/l	> 100	72 h	Scenedesmus capricornutum	REACH Dossier
	Acute crustacea toxicity	EC50 (LL50) mg/l	>100	48 h	Daphnia magna	REACH Dossier
6197-30-4	2-Ethylhexyl-2-cyano-3,3-diphenyl-2-propenoate					
	Acute fish toxicity	LC50 mg/l	> 10000	96 h	Leuciscus idus	Study report (1990) other: German standard DIN 38412, part 1
	Acute algae toxicity	ErC50 mg/l	> 220	72 h	Desmodesmus subspicatus	Study report (2010) OECD Guideline 201
	Acute crustacea toxicity	EC50 mg/l	> 100	48 h	Daphnia magna	Study report (2000) OECD Guideline 202
	Fish toxicity	NOEC mg/l	> 0,02	21 d	Gasterosteus aculeatus	Study report (2018) other: OECD guidance document No 148
	Crustacea toxicity	NOEC mg/l	0,00266	21 d	Daphnia magna	Study report (2018) OECD Guideline 211
	Acute bacteria toxicity	EC50 mg/l ()	> 1000	0,5 h	activated sludge, domestic	Study report (1991) OECD Guideline 209

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74563-64-7	3,7,11,15-tetramethylhexadecane-1,2,3-triol					
	Acute fish toxicity	LC50 mg/l	>1000	96 h	Oncorhynchus mykiss (Rainbow trout)	MSDS external
	Acute crustacea toxicity	EC50 mg/l	>100	48 h	Daphnia magna	MSDS external
	Acute bacteria toxicity	EC50 mg/l ()	>1000	3 h	Activated sludge	MSDS external

12.2. Persistence and degradability

CAS No	Chemical name				
	Method	Value	d	Source	
	Evaluation				
64-17-5	ethanol; ethyl alcohol				
	other method (BOD method 1971)	84 %	20	REACH Dossier	
	Readily biodegradable				
118-60-5	Ethyl hexyl salicylate				
	EU Method C.4-E	89 %	28	REACH Dossier	
	Product is biodegradable.				
70356-09-1	1-[4-(1,1-dimethylethyl)phenyl]-3-(4-methoxyphenyl)propane-1,3-dione				
	ISO 11734	0 %	79	REACH Dossier	
	Not easily bio-degradable (according to OECD-criteria).				
6197-30-4	2-Ethylhexyl-2-cyano-3,3-diphenyl-2-propenoate				
	EU Method C.4-D	0%	28	ECHA Dossier	
	Not easily bio-degradable (according to OECD-criteria).				
74563-64-7	3,7,11,15-tetramethylhexadecane-1,2,3-triol				
	OECD 301F/ ISO 9408/ EEC 92/69/V, C.4-D	60-70%	28	MSDS external	
	Readily biodegradable (according to OECD criteria).				

12.3. Bioaccumulative potential

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
64-17-5	ethanol; ethyl alcohol	-0,77
118-60-5	Ethyl hexyl salicylate	> 6
70356-09-1	1-[4-(1,1-dimethylethyl)phenyl]-3-(4-methoxyphenyl)propane-1,3-dione	6,1
6197-30-4	2-Ethylhexyl-2-cyano-3,3-diphenyl-2-propenoate	6,1
74563-64-7	3,7,11,15-tetramethylhexadecane-1,2,3-triol	4,7

BCF

CAS No	Chemical name	BCF	Species	Source
64-17-5	ethanol; ethyl alcohol	1	Cyprinus carpio	REACH Dossier
6197-30-4	2-Ethylhexyl-2-cyano-3,3-diphenyl-2-propenoate	858	Danio rerio	Study report (2008)
74563-64-7	3,7,11,15-tetramethylhexadecane-1,2,3-triol	2500	calculated.	MSDS external

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

The mixture contains the following substances fulfilling the PBT criteria according to REACH, annex XIII: 1-[4-(1,1-dimethylethyl)phenyl]-3-(4-methoxyphenyl)propane-1,3-dione.

12.6. Endocrine disrupting properties

Endocrine disrupting properties: 1-[4-(1,1-dimethylethyl)phenyl]-3-(4-methoxyphenyl)propane-1,3-dione.

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12.7. Other adverse effects

No data available.

Further information

Do not allow to enter into surface water or drains.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Observe in addition any national regulations! Consult the local waste disposal expert about waste disposal.

Non-contaminated packages may be recycled.

According to (EWC) European Waste Catalogue, allocation of waste identity numbers/waste descriptions must be carried out in a specific way for every industry and process.

Control report for waste code/ waste marking according to (EWC) European Waste Catalogue:

List of Wastes Code - residues/unused products

160305 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; off-specification batches and unused products; organic wastes containing hazardous substances; hazardous waste

List of Wastes Code - used product

160305 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; off-specification batches and unused products; organic wastes containing hazardous substances; hazardous waste

List of Wastes Code - contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

Contaminated packaging

Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number:

UN 3082

14.2. UN proper shipping name:

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ((±)
-1,7,7-trimethyl-3-[(4-methylphenyl)methylene]bicyclo[2.2.1]heptan-2-one)

14.3. Transport hazard class(es):

9

14.4. Packing group:

III

Hazard label:

9



Classification code:

M6

Special Provisions:

274 335 375 601

Limited quantity:

5 L

Excepted quantity:

E1

Transport category:

3

Hazard No:

90

Tunnel restriction code:

-

Inland waterways transport (ADN)

14.1. UN number or ID number:

UN 3082

14.2. UN proper shipping name:

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ((±)
-1,7,7-trimethyl-3-[(4-methylphenyl)methylene]bicyclo[2.2.1]heptan-2-one)

14.3. Transport hazard class(es):

9

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14.4. Packing group:

Hazard label:

III

9



Classification code:

M6

Special Provisions:

274 335 375 601

Limited quantity:

5 L

Excepted quantity:

E1

Marine transport (IMDG)**14.1. UN number or ID number:**

UN 3082

14.2. UN proper shipping name:ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ((±)
-1,7,7-trimethyl-3-[(4-methylphenyl)methylene]bicyclo[2.2.1]heptan-2-one)**14.3. Transport hazard class(es):**

9

14.4. Packing group:

III

Hazard label:

9



Marine pollutant:

YES

Special Provisions:

274 335 969

Limited quantity:

5 L

Excepted quantity:

E1

EmS:

F-A, S-F

Air transport (ICAO-TI/IATA-DGR)**14.1. UN number or ID number:**

UN 3082

14.2. UN proper shipping name:ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ((±)
-1,7,7-trimethyl-3-[(4-methylphenyl)methylene]bicyclo[2.2.1]heptan-2-one)**14.3. Transport hazard class(es):**

9

14.4. Packing group:

III

Hazard label:

9



Special Provisions:

A97 A158 A197 A215

Limited quantity Passenger:

30 kg G

Passenger LQ:

Y964

Excepted quantity:

E1

IATA-packing instructions - Passenger:

964

IATA-max. quantity - Passenger:

450 L

IATA-packing instructions - Cargo:

964

IATA-max. quantity - Cargo:

450 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS:

Yes



Danger releasing substance:

((±)-1,7,7-trimethyl-3-
[(4-methylphenyl)methylene]bicyclo[2.2.1]heptan-2-one)**14.6. Special precautions for user**

refer to section 6 - 8

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14.7. Maritime transport in bulk according to IMO instruments

not relevant

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulatory information**

Authorisations (REACH, annex XIV):

Substances of very high concern, SVHC (REACH, article 59):

(±)-1,7,7-trimethyl-3-[(4-methylphenyl)methylene]bicyclo[2.2.1]heptan-2-one

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 40, Entry 75

Directive 2010/75/EU on industrial emissions:

No information available.

Directive 2004/42/EC on VOC in paints and varnishes:

No information available.

Information according to Directive 2012/18/EU (SEVESO III):

Not subject to 2012/18/EU (SEVESO III)

Additional information

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

REACH 1907/2006 Appendix XVII, No.: 3

National regulatory information

Employment restrictions:

Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

Water hazard class (D):

2 - obviously hazardous to water

15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out:

ethanol; ethyl alcohol

Ethyl hexyl salicylate

1-[4-(1,1-dimethylethyl)phenyl]-3-(4-methoxyphenyl)propane-1,3-dione

2-Ethylhexyl-2-cyano-3,3-diphenyl-2-propenoate

SECTION 16: Other information**Changes**

Rev. 1,0; 25.04.2016, Initial release

Rev. 2,0; 29.01.2018, Changes in section: 2, 3, 5, 7, 8, 13, 14, 15, 16.

Rev. 3,0; 26.07.2018, Changes in section: 2, 3.

Rev. 4,0; 08.01.2025, Changes in section: 2-16.

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Abbreviations and acronyms

Flam. Liq: Flammable liquid
 Skin Irrit: Skin irritation
 Eye Irrit: Eye irritation
 Skin Sens: Skin sensitisation
 Repr: Reproductive toxicity
 Aquatic Acute: Acute aquatic hazard
 Aquatic Chronic: Chronic aquatic hazard
 ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 AGW: Arbeitsplatzgrenzwert
 CAS: Chemical Abstracts Service
 CLP: Classification, Labelling and Packaging of substances and mixtures
 DNEL: Derived No Effect Level
 d: day(s)
 EINECS: European INventory of Existing Commercial chemical Substances
 ELINCS: European List of Notified Chemical Substances
 ECHA: European Chemicals Agency
 EWC: European Waste Catalogue
 IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER
 IMDG: International Maritime Code for Dangerous Goods
 IATA: International Air Transport Association
 IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
 ICAO: International Civil Aviation Organization
 ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
 GHS: Globally Harmonized System of Classification and Labelling of Chemicals
 GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)
 h: hour
 LOAEL: Lowest observed adverse effect level
 LOAEC: Lowest observed adverse effect concentration
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent
 NOAEL: No observed adverse effect level
 NOAEC: No observed adverse effect concentration
 NLP: No-Longer Polymers
 N/A: not applicable
 OECD: Organisation for Economic Co-operation and Development
 PNEC: predicted no effect concentration
 PBT: Persistent bioaccumulative toxic
 RID: Regulation Concerning the International Transport of Dangerous Goods by Rail
 REACH: Registration, Evaluation, Authorisation of Chemicals
 SVHC: substance of very high concern
 TRGS: Technische Regeln für Gefahrstoffe
 UN: United Nations
 VOC: Volatile Organic Compounds
 WGK: Water Hazard Class (Germany)

Classification for mixtures and used evaluation method according to Regulation (EC) No 1272/2008 [CLP]

Classification	Classification procedure
Repr. 2; H361d	Calculation method
Aquatic Chronic 2; H411	Calculation method

Relevant H and EUH statements (number and full text)

H225 Highly flammable liquid and vapour.
 H315 Causes skin irritation.
 H317 May cause an allergic skin reaction.

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H319	Causes serious eye irritation.
H361d	Suspected of damaging the unborn child.
H361f	Suspected of damaging fertility.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.
EUH208	Contains 3,7,11,15-tetramethylhexadecane-1,2,3-triol. May produce an allergic reaction.

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

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