

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Version 6.22

Revision Date 30.04.2025

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GENERIC EU MSDS - NO COUNTRY SPECIFIC DATA - NO OEL DATA

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

1.1 Product identifiers

Product name : LSMLS Plate 7 (Lipophilic)

Product Number : LSMLS07

Brand : Sigma

REACH No. : This product is a mixture. REACH Registration Number see section 3.

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

Identified uses : Laboratory chemicals, Manufacture of substances

Uses advised against : For R&D use only. Not for pharmaceutical, household or other uses.

1.3

CHEMIKART

1.4 Emergency telephone

Emergency Phone # : 000 800 1007 141 (CHEMTREC)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Acute toxicity, (Category 4)	H332: Harmful if inhaled.
Skin irritation, (Category 2)	H315: Causes skin irritation.
Serious eye damage, (Category 1)	H318: Causes serious eye damage.
Skin sensitization, (Category 1)	H317: May cause an allergic skin reaction.
Germ cell mutagenicity, (Category 2)	H341: Suspected of causing genetic defects.

Carcinogenicity, (Category 1B)	H350: May cause cancer.
Reproductive toxicity, (Category 1A)	H360FD: May damage fertility. May damage the unborn child.
Effects on or via lactation	H362: May cause harm to breast-fed children.
Specific target organ toxicity - repeated exposure, (Category 2), Thyroid, Cardio-vascular system, Kidney	H373: May cause damage to organs through prolonged or repeated exposure.
Specific target organ toxicity - repeated exposure, (Category 2)	H373: May cause damage to organs through prolonged or repeated exposure if swallowed.
Short-term (acute) aquatic hazard, (Category 1)	H400: Very toxic to aquatic life.
Long-term (chronic) aquatic hazard, (Category 1)	H410: Very toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram

Signal Word	Danger
Hazard Statements	
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H332	Harmful if inhaled.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
H360FD	May damage fertility. May damage the unborn child.
H362	May cause harm to breast-fed children.
H373	May cause damage to organs through prolonged or repeated exposure if swallowed.
H373	May cause damage to organs (Thyroid, Cardio-vascular system, Kidney) through prolonged or repeated exposure.
H410	Very toxic to aquatic life with long lasting effects.
Precautionary Statements	
P263	Avoid contact during pregnancy and while nursing.
P273	Avoid release to the environment.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P304 + P340 + P312	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313	IF exposed or concerned: Get medical advice/ attention.

Supplemental Hazard
Statements

none

Restricted to professional users.
Restricted to professional users.

Reduced Labeling (<= 125 ml)

Pictogram

Signal Word

Danger

Hazard Statements

H317

May cause an allergic skin reaction.

H341

Suspected of causing genetic defects.

H350

May cause cancer.

H362

May cause harm to breast-fed children.

H318

Causes serious eye damage.

H360FD

May damage fertility. May damage the unborn child.

Precautionary Statements

P280

Wear protective gloves/ protective clothing/ eye protection/ face protection.

P305 + P351 + P338

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308 + P313

IF exposed or concerned: Get medical advice/ attention.

Supplemental Hazard
Statements

none

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information:

This substance/mixture contains components considered to have endocrine disrupting properties for environment, according to REACH Article 57(f), Commission Regulation (EU) 2018/605 or Commission Delegated Regulation (EU) 2017/2100.

Toxicological information:

This substance/mixture contains components considered to have endocrine disrupting properties affecting human health, according to REACH Article 57(f), Commission Regulation (EU) 2018/605 or Commission Delegated Regulation (EU) 2017/2100.

Caution: Physiologically highly active, therapeutically usable substance. The substance must be handled with the care required for hazardous materials.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Component		Classification	Concentration
2-Propenoic acid, 3-(4-hydroxyphenyl)-, (E)-			
CAS-No.	501-98-4	Skin Irrit. 2; Eye Irrit. 2; STOT SE 3; H315, H319, H335	>= 1 - < 10 %
EC-No.	610-511-6		

*			
retinol			
CAS-No.	68-26-8	Eye Irrit. 2; Skin Sens. 1; Repr. 1B; Aquatic Chronic 4; H319, H317, H360FD, H413	>= 1 - < 2,5 %
EC-No.	200-683-7		
	*		
all-trans-squalene			
CAS-No.	111-02-4	Asp. Tox. 1; H304	>= 1 - < 10 %
EC-No.	203-826-1		
	*		
Ursodeoxycholic acid			
CAS-No.	128-13-2	Skin Irrit. 2; Eye Irrit. 2; H315, H319	>= 1 - < 10 %
EC-No.	204-879-3		
	*		
ergocalciferol			
CAS-No.	50-14-6	Acute Tox. 3; Acute Tox. 2; Acute Tox. 3; STOT RE 1; H301, H330, H311, H372	>= 1 - < 10 %
EC-No.	200-014-9		
Index-No.	603-179-00-9		
	*		
heptanoic acid; oenanthic acid			
CAS-No.	111-14-8	Acute Tox. 4; Skin Corr. 1B; Eye Dam. 1; STOT SE 3; H332, H314, H318, H335	>= 1 - < 3 %
EC-No.	203-838-7		
Index-No.	607-196-00-2		
	*		
nonanoic acid			
CAS-No.	112-05-0	Skin Irrit. 2; Eye Irrit. 2; H315, H319	>= 1 - < 10 %
EC-No.	203-931-2		
Index-No.	607-197-00-8		
Registration number	01-2119529247-37-XXXX		
Octanoic acid			
CAS-No.	124-07-2	Skin Corr. 1C; Eye Dam. 1; Aquatic Chronic 3; H314, H318, H412	>= 1 - < 2,5 %
EC-No.	204-677-5		
Index-No.	607-708-00-4		
Registration number	01-2119552491-41-XXXX		
(Z)-Hexadec-9-enoic acid			
CAS-No.	373-49-9	Skin Irrit. 2; Eye Irrit. 2; STOT SE 3; Aquatic Chronic 4; H315, H319, H335, H413	>= 1 - < 2,5 %
EC-No.	206-765-9		
	*		
Chenodeoxycholic acid			
CAS-No.	474-25-9	Skin Irrit. 2; Eye Irrit. 2; H315, H319	>= 1 - < 10 %
EC-No.	207-481-8		

*			
3,3'-(3,7,12,17-Tetramethyl-8,13-divinylporphine-2,18-diyl)di(propionic acid)			
CAS-No.	553-12-8	Skin Irrit. 2; Eye Irrit. 2; STOT SE 3; H315, H319, H335	>= 1 - < 10 %
EC-No.	209-033-7		
*			
α-estradiol			
CAS-No.	57-91-0	Muta. 2; Carc. 2; Repr. 1A; Lact. ; Aquatic Chronic 1; H341, H351, H360F, H362, H410	>= 1 - < 2,5 %
EC-No.	200-354-8		
*			
1-Hydroxy-2-naphthoesäure			
CAS-No.	86-48-6	Skin Irrit. 2; Eye Irrit. 2; STOT SE 3; H315, H319, H335	>= 1 - < 10 %
EC-No.	201-674-0		
*			
D-(+)-erythro-4-trans-Sphingenine			
CAS-No.	123-78-4	Aquatic Chronic 4; H413	>= 1 - < 2,5 %
EC-No.	204-651-3		
*			
quinoline			
CAS-No.	91-22-5	Acute Tox. 3; Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2; Muta. 2; Carc. 1B; Aquatic Chronic 2; H301, H312, H315, H319, H341, H350, H411	>= 1 - < 2,5 %
EC-No.	202-051-6		
Index-No.	613-281-00-5		
*			
Vitamin A palmitate			
CAS-No.	79-81-2	Repr. 1B; Aquatic Chronic 3; H360D, H412	>= 1 - < 2,5 %
EC-No.	201-228-5		
*			
cortisone			
CAS-No.	53-06-5	Repr. 2; H361d	>= 1 - < 3 %
EC-No.	200-162-4		
*			
L-thyroxine			
CAS-No.	51-48-9	STOT RE 1; H372	>= 1 - < 10 %
EC-No.	200-101-1		
*			
Icosanoic acid			
CAS-No.	506-30-9	Skin Irrit. 2; Eye Irrit. 2; H315, H319	>= 1 - < 10 %
EC-No.	208-031-3		

*			
Gamma-linolenic acid			
CAS-No.	506-26-3	Skin Irrit. 2; Eye Irrit. 2; STOT SE 3; H315, H319, H335	>= 1 - < 10 %
*			
Decanoic acid			
CAS-No.	334-48-5	Skin Irrit. 2; Eye Irrit. 2; Aquatic Chronic 3; H315, H319, H412	>= 1 - < 2,5 %
EC-No.	206-376-4		
Index-No.	607-709-00-X		
Registration number	01-2120139722-58-XXXX		
Tricosanoic acid			
CAS-No.	2433-96-7	Skin Irrit. 2; Eye Irrit. 2; STOT SE 3; H315, H319, H335	>= 1 - < 10 %
EC-No.	219-419-7		
*			
trans-cinnamic acid			
CAS-No.	140-10-3	Eye Irrit. 2; H319	>= 1 - < 10 %
EC-No.	205-398-1		
Registration number	01-2120765001-68-XXXX		
indole			
CAS-No.	120-72-9	Acute Tox. 4; Acute Tox. 3; Eye Irrit. 2; Aquatic Acute 1; H302, H311, H319, H400 M-Factor - Aquatic Acute: 1	>= 1 - < 2,5 %
EC-No.	204-420-7		
*			
cis-13-erucic acid			
CAS-No.	112-86-7	Skin Irrit. 2; Eye Irrit. 2; STOT SE 3; H315, H319, H335	>= 1 - < 10 %
EC-No.	204-011-3		
*			
2-undecanone, n-			
CAS-No.	112-12-9	Aquatic Acute 1; Aquatic Chronic 1; H400, H410 M-Factor - Aquatic Acute: 1	>= 1 - < 2,5 %
EC-No.	203-937-5		
*			
4-methyl-2-oxovaleric acid			
CAS-No.	816-66-0	Skin Corr. 1B; Eye Dam. 1; H314, H318	>= 1 - < 3 %
EC-No.	212-435-5		
*			
lauric acid			
CAS-No.	143-07-7	Eye Dam. 1; H318	>= 1 - < 3 %
EC-No.	205-582-1		

Registration number	01-2119538184-40-XXXX		
sodium deoxycholate			
CAS-No.	302-95-4	Acute Tox. 4; H302	>= 1 - < 10 %
EC-No.	206-132-7		
Registration number	01-2120768604-47-XXXX		
Vitamin A acid			
CAS-No.	302-79-4	Acute Tox. 4; Skin Irrit. 2; Repr. 1B; Aquatic Acute 1; Aquatic Chronic 1; H302, H315, H360FD, H400, H410	>= 1 - < 2,5 %
EC-No.	206-129-0	M-Factor - Aquatic Acute: 100 - Aquatic Chronic: 100	
	*		
Bis(2-ethylhexyl) phthalate Included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation (EC) No. 1907/2006 (REACH)			
CAS-No.	117-81-7	Repr. 1B; H360FD	>= 1 - < 10 %
EC-No.	204-211-0		
Index-No.	607-317-00-9		
Registration number	01-2119484611-38-XXXX		

*A registration number is not available for this substance as the substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) No 1907/2006, or the annual tonnage does not require a registration.

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

Consult a physician. Show this material safety data sheet to the doctor in attendance. Show this material safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. After inhalation: fresh air. Immediately call in physician. If breathing stops: immediately apply artificial respiration, if necessary also oxygen.

In case of skin contact

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician. In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician. After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: Firefighting measures**5.1 Extinguishing media****Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Foam Carbon dioxide (CO₂) Dry powder

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Carbon oxides

Nitrogen oxides (NO_x)

Sulfur oxides

Oxides of phosphorus

Hydrogen iodide

Sodium oxides

Mixture with combustible ingredients.

Development of hazardous combustion gases or vapours possible in the event of fire.

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary. Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

5.4 Further information

Use water spray to cool unopened containers. Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

For personal protection see section 8.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided. Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Keep in suitable, closed containers for disposal. Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully with liquid-absorbent material (e.g. Chemizorb®). Dispose of properly. Clean up affected area.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling

Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols.

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

Hygiene measures

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Keep container tightly closed in a dry and well-ventilated place. Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store in cool place. Tightly closed. Keep in a well-ventilated place. Keep locked up or in an area accessible only to qualified or authorized persons.

Storage stability Recommended storage temperature
-20 °C

Storage class

Storage class (TRGS 510): 6.1C: Combustible, acute toxic Cat.3 / toxic compounds or compounds which causing chronic effects

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with workplace control parameters

8.2 Exposure controls

Personal protective equipment

Eye/face protection

Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Tightly fitting safety goggles

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

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

required

Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
protective clothing

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

required when vapours/aerosols are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Recommended Filter type: Filter type ABEK

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer.

These measures have to be properly documented.

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Discharge into the environment must be avoided.

Do not let product enter drains.

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties**

- | | |
|---|--|
| a) Physical state | liquid |
| b) Color | No data available |
| c) Odor | No data available |
| d) Melting point/freezing point | No data available |
| e) Initial boiling point and boiling range | No data available |
| f) Flammability (solid, gas) | No data available |
| g) Upper/lower flammability or explosive limits | No data available |
| h) Flash point | No data available |
| i) Autoignition temperature | No data available |
| j) Decomposition temperature | No data available |
| k) pH | No data available |
| l) Viscosity | Viscosity, kinematic: No data available
Viscosity, dynamic: No data available |
| m) Water solubility | No data available |
| n) Partition coefficient: n-octanol/water | No data available |
| o) Vapor pressure | No data available |
| p) Density | No data available |
| Relative density | No data available |
| q) Relative vapor density | No data available |
| r) Particle characteristics | No data available |
| | |
| s) Explosive properties | No data available |
| t) Oxidizing properties | No data available |

9.2 Other safety information

No data available

SECTION 10: Stability and reactivity**10.1 Reactivity**

No data available

10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Violent reactions possible with:
Strong oxidizing agents

10.4 Conditions to avoid

Heat, flames and sparks.
no information available

10.5 Incompatible materials

No data available

10.6 Hazardous decomposition products

In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Mixture

Acute toxicity

Acute toxicity estimate Oral - > 2.000 mg/kg
(Calculation method)

Symptoms: Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract.

Acute toxicity estimate Inhalation - 4 h - 3,7 mg/l - dust/mist (Calculation method)

Symptoms: Possible symptoms: , mucosal irritations

Acute toxicity estimate Dermal - > 2.000 mg/kg
(Calculation method)

Skin corrosion/irritation

Remarks: Mixture causes skin irritation.

Serious eye damage/eye irritation

Remarks: Mixture causes serious eye damage.

Respiratory or skin sensitization

Mixture may cause an allergic skin reaction.

Germ cell mutagenicity

Evidence of genetic defects.

Carcinogenicity

Possible carcinogen.

Reproductive toxicity

May harm the unborn child. Positive evidence from human epidemiological studies.

May impair fertility. Positive evidence from human epidemiological studies.

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

Mixture may cause damage to organs through prolonged or repeated exposure.

- Thyroid, Cardio-vascular system, Kidney

Mixture may cause damage to organs through prolonged or repeated exposure.

Aspiration hazard

No data available

11.2 Additional Information**Endocrine disrupting properties****Product:**

Assessment

This substance/mixture contains components considered to have endocrine disrupting properties affecting human health, according to REACH Article 57(f), Commission Regulation (EU) 2018/605 or Commission Delegated Regulation (EU) 2017/2100.

Components:**Bis(2-ethylhexyl) phthalate:**

Assessment

The substance is considered to have endocrine disrupting properties according to REACH Article 57(f) for human health.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Other dangerous properties can not be excluded.

This substance should be handled with particular care.

Handle in accordance with good industrial hygiene and safety practice.

Components**2-Propenoic acid, 3-(4-hydroxyphenyl)-, (E)-****Acute toxicity**

LD50 Oral - Mouse - 2.850 mg/kg

Remarks: Behavioral:Somnolence (general depressed activity).

Respiratory disorder

(RTECS)

Inhalation: No data available

Dermal: No data available

Skin corrosion/irritation

Remarks: Causes skin irritation.

Serious eye damage/eye irritation

Remarks: Causes serious eye irritation.

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

Inhalation - May cause respiratory irritation.

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

retinol**Acute toxicity**

LD50 Oral - Rat - male and female - 9.560 mg/kg

(OECD Test Guideline 401)

Inhalation: No data available

Dermal: No data available

Skin corrosion/irritation

Skin - Rabbit

Result: negative - 4 h

(OECD Test Guideline 404)

Serious eye damage/eye irritation

Eyes - Rabbit

Result: Irritation to eyes, reversing within 7 days - 24 h

(OECD Test Guideline 405)

Respiratory or skin sensitization

Buehler Test - Guinea pig

Result: positive

(OECD Test Guideline 406)

Germ cell mutagenicity

Test Type: Ames test

Test system: Escherichia coli/Salmonella typhimurium

Result: negative

Carcinogenicity

No data available

Reproductive toxicity

May damage the unborn child.

May damage fertility.

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

all-trans-squalene

Acute toxicity

LD50 Oral - Mouse - 50.000 mg/kg

(OECD Test Guideline 401)

LD50 Inhalation - Rat - 4 h - 13.800 mg/l - vapor

Dermal: No data available

Skin corrosion/irritation

Skin - Rabbit

Result: No skin irritation - 24 h

(Draize Test)

Serious eye damage/eye irritation

Eyes - Rabbit

Result: No eye irritation

(Draize Test)

Respiratory or skin sensitization

Maximization Test

Result: Not sensitising

(OECD Test Guideline 406)

Germ cell mutagenicity

Test Type: Ames test

Test system: Salmonella typhimurium

Result: negative

Remarks: (National Toxicology Program)

Test Type: Chromosome aberration test in vitro

Test system: lymphocyte

Result: negative

Test Type: sister chromatid exchange assay

Test system: lymphocyte

Result: negative

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

Aspiration may cause pulmonary edema and pneumonitis.

Ursodeoxycholic acid

Acute toxicity

LD50 Oral - Rat - 4.600 mg/kg

Remarks: (RTECS)

Inhalation: No data available

Dermal: No data available

Skin corrosion/irritation

Remarks: Causes skin irritation.
(ECHA)

Serious eye damage/eye irritation

Remarks: Causes serious eye irritation.
(ECHA)

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

Test Type: In vitro mammalian cell gene mutation test

Test system: mouse lymphoma cells

Result: negative

Remarks: (ECHA)

Species: Hamster

Result: negative

Remarks: (ECHA)

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

ergocalciferol**Acute toxicity**

LD50 Oral - Rat - 10 mg/kg

Remarks: (RTECS)

(Regulation (EC) No 1272/2008, Annex VI)

Inhalation: No data available

Dermal: No data available

Skin corrosion/irritation

Remarks: No data available

Serious eye damage/eye irritation

Remarks: No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

Ingestion - Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard

No data available

heptanoic acid; oenanthic acid**Acute toxicity**

LD50 Oral - Rat - 7.000 mg/kg

Remarks: (RTECS)

LC50 Inhalation - Rat - male and female - 4 h - > 4,6 mg/l - dust/mist
(OECD Test Guideline 403)

Symptoms: mucosal irritations, Cough, Shortness of breath, Possible damages:, damage of respiratory tract

LC50 Inhalation - 4 h - 11 mg/l - vapor

Acute toxicity estimate Inhalation - 4,61 mg/l - dust/mist
(ATE value derived from LD50/LC50 value)

Dermal: No data available

Skin corrosion/irritation

Skin - Rabbit

Result: Causes burns.

(OECD Test Guideline 404)

Serious eye damage/eye irritation

Remarks: Causes serious eye damage.

Respiratory or skin sensitization

Maximization Test - Guinea pig

Result: negative

(OECD Test Guideline 406)

Germ cell mutagenicity

Test Type: In vitro mammalian cell gene mutation test

Test system: mouse lymphoma cells

Result: negative

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

Inhalation - May cause respiratory irritation. - Respiratory Tract

Acute inhalation toxicity - mucosal irritations, Cough, Shortness of breath, Possible damages:, damage of respiratory tract

Specific target organ toxicity - repeated exposure**Aspiration hazard**

No data available

nonanoic acid

Acute toxicity

LD50 Oral - Rat - male and female - > 2.000 mg/kg
(OECD Test Guideline 423)

Inhalation: No data available

LD50 Dermal - Rat - male and female - > 2.000 mg/kg
(OECD Test Guideline 402)

Skin corrosion/irritation

Skin - Rabbit

Result: Irritations - 4 h

(OECD Test Guideline 404)

Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Serious eye damage/eye irritation

Remarks: Causes serious eye irritation.

Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Respiratory or skin sensitization

Local lymph node assay (LLNA) - Mouse

Result: negative

(OECD Test Guideline 429)

Germ cell mutagenicity

Test Type: Ames test

Test system: Escherichia coli/Salmonella typhimurium

Result: negative

Test Type: Mutagenicity (mammal cell test): chromosome aberration.

Test system: Human lymphocytes

Result: negative

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

Aspiration hazard

No data available

Octanoic acid

Acute toxicity

LD50 Oral - Rat - male and female - > 2.000 mg/kg
(OECD Test Guideline 401)

Symptoms: If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach.

Symptoms: mucosal irritations, Cough, Shortness of breath, Possible damages:, damage of respiratory tract, Inhalation may lead to the formation of oedemas in the respiratory tract., Symptoms may be delayed.

LD50 Dermal - Rabbit - > 5.000 mg/kg
Remarks: (RTECS)

Skin corrosion/irritation

Skin - Rabbit

Result: Corrosive after 1 to 4 hours of exposure - 4 h
(OECD Test Guideline 404)

Remarks: (Regulation (EC) No 1272/2008, Annex VI)

Serious eye damage/eye irritation

Remarks: Causes serious eye damage.

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

Test Type: Chromosome aberration test in vitro

Test system: Human lymphocytes

Result: negative

Test Type: Chromosome aberration test in vitro

Test system: Chinese hamster lung cells

Result: negative

Test Type: Ames test

Test system: Escherichia coli/Salmonella typhimurium

Result: negative

Test Type: Chromosome aberration test in vitro

Test system: Chinese hamster ovary cells

Result: Positive results were obtained in some in vitro tests.

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

Acute oral toxicity - If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach.

Acute inhalation toxicity - mucosal irritations, Cough, Shortness of breath, Possible damages:, damage of respiratory tract, Inhalation may lead to the formation of oedemas in the respiratory tract., Symptoms may be delayed.

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

(Z)-Hexadec-9-enoic acid

Acute toxicity

Oral: No data available

Inhalation: Irritating to respiratory system.

Dermal: No data available

Skin corrosion/irritation

Remarks: Causes skin irritation.

Serious eye damage/eye irritation

Remarks: Causes serious eye irritation.

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

Inhalation - May cause respiratory irritation.

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Chenodeoxycholic acid**Acute toxicity**

LD50 Oral - Rat - 4.000 mg/kg

Remarks: Behavioral:Change in motor activity (specific assay).

Lungs, Thorax, or Respiration:Dyspnea.

Diarrhea

(RTECS)

Inhalation: No data available

Dermal: No data available

Skin corrosion/irritation

Remarks: Causes skin irritation.

(ECHA)

Serious eye damage/eye irritation

Remarks: Causes serious eye irritation.

(ECHA)

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

Laboratory experiments have shown mutagenic effects.

Carcinogenicity

No data available

Reproductive toxicity

Possible risk of congenital malformation in the fetus.

Overexposure may cause reproductive disorder(s) based on tests with laboratory animals.

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

3,3'-(3,7,12,17-Tetramethyl-8,13-divinylporphine-2,18-diyl)di(propionic acid)

Acute toxicity

Oral: No data available
Inhalation: No data available
Dermal: No data available

Skin corrosion/irritation

Remarks: No data available

Serious eye damage/eye irritation

Remarks: No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

Inhalation - May cause respiratory irritation.

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

α -estradiol

Acute toxicity

Oral: No data available
Inhalation: No data available
Dermal: No data available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

Suspected of causing genetic defects.

Carcinogenicity

Suspected of causing cancer.

Reproductive toxicity

Studies indicating a hazard to babies during the lactation period May damage fertility. Positive evidence from human epidemiological studies.

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

1-Hydroxy-2-naphthoesäure

Acute toxicity

Oral: No data available

Inhalation: No data available

Dermal: No data available

Skin corrosion/irritation

Remarks: No data available

Serious eye damage/eye irritation

Remarks: No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

Inhalation - May cause respiratory irritation.

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

D-(+)-erythro-4-trans-Sphingenine

Acute toxicity

Oral: No data available

Inhalation: No data available

Dermal: No data available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

quinoline**Acute toxicity**

LD50 Oral - Rat - male and female - 262 mg/kg

(OECD Test Guideline 401)

Symptoms: Nausea, Vomiting, Gastrointestinal disturbance

Symptoms: Possible damages: , mucosal irritations

LD50 Dermal - Rat - male and female - 1.377 mg/kg

(OECD Test Guideline 402)

Skin corrosion/irritation

Skin - Rabbit

Result: irritating - 24 h

(Draize Test)

Remarks: (ECHA)

Serious eye damage/eye irritation

Eyes - Rabbit

Result: Severe irritations - 24 h

Remarks: (ECHA)

Respiratory or skin sensitization

Local lymph node assay (LLNA) - Mouse

Result: negative

(OECD Test Guideline 429)

Germ cell mutagenicity

Suspected of causing genetic defects.

Test Type: Mutagenicity (mammal cell test): chromosome aberration.

Test system: Chinese hamster ovary cells

Result: Positive results were obtained in some in vitro tests.

Remarks: (ECHA)

Test Type: Ames test

Test system: Salmonella typhimurium

Result: Positive results were obtained in some in vitro tests.

Remarks: (ECHA)

Test Type: sister chromatid exchange assay

Test system: Chinese hamster ovary cells

Result: Positive results were obtained in some in vitro tests.

Remarks: (ECHA)

Test Type: In vitro mammalian cell gene mutation test

Test system: Mouse lymphoma test

Result: positive

Remarks: (ECHA)

Species: Mouse - male - Bone marrow

Result: positive
Remarks: (ECHA)

Carcinogenicity

Presumed to have carcinogenic potential for humans

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

Acute oral toxicity - Nausea, Vomiting, Gastrointestinal disturbance

Acute inhalation toxicity - Possible damages:, mucosal irritations

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Vitamin A palmitate

Acute toxicity

LD50 Oral - Rat - male and female - > 2.000 mg/kg

(OECD Test Guideline 401)

Inhalation: No data available

Dermal: No data available

Skin corrosion/irritation

Skin - Rabbit

Result: No skin irritation - 4 h

(OECD Test Guideline 404)

Serious eye damage/eye irritation

Eyes - Rabbit

Result: No eye irritation - 72 h

(OECD Test Guideline 405)

Respiratory or skin sensitization

Maximization Test - Guinea pig

Result: Does not cause skin sensitization.

(OECD Test Guideline 406)

Germ cell mutagenicity

No data available

Test Type: Ames test

Test system: S. typhimurium

Result: negative

Method: OECD Test Guideline 474

Species: Mouse - male

Result: negative

Method: OECD Test Guideline 474

Species: Mouse - male

Result: negative

Carcinogenicity

No data available

Reproductive toxicity

May damage the unborn child.

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

cortisone**Acute toxicity**

Oral: No data available

Inhalation: No data available

Dermal: No data available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

Suspected of damaging the unborn child.

Suspected of damaging fertility.

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

L-thyroxine**Acute toxicity**

Oral: No data available

Inhalation: No data available

Dermal: No data available

Skin corrosion/irritation

Skin - EPISKIN Human Skin Model Test

Result: No skin irritation - 15 min

(OECD Test Guideline 439)

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

Test Type: Ames test

Test system: Escherichia coli/Salmonella typhimurium

Result: negative

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

Causes damage to organs through prolonged or repeated exposure.

- Thyroid, Cardio-vascular system, Kidney

Aspiration hazard

No data available

Icosanoic acid**Acute toxicity**

Oral: No data available

Inhalation: No data available

Dermal: No data available

Skin corrosion/irritation

Remarks: Causes skin irritation.

Serious eye damage/eye irritation

Remarks: Causes serious eye irritation.

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Gamma-linolenic acid**Acute toxicity**

Oral: No data available

Inhalation: No data available

Dermal: No data available

Skin corrosion/irritation

Remarks: No data available

Serious eye damage/eye irritation

Remarks: No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

Inhalation - May cause respiratory irritation.

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Decanoic acid**Acute toxicity**

LD50 Oral - Rat - male and female - > 2.000 mg/kg

(OECD Test Guideline 401)

Inhalation: No data available

LD50 Dermal - Rat - male and female - > 2.000 mg/kg

(OECD Test Guideline 402)

Skin corrosion/irritation

Skin - Rabbit

Result: Irritating to skin. - 24 h

(Draize Test)

Remarks: (RTECS)

Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Serious eye damage/eye irritation

Eyes - Rabbit

Result: Eye irritation

(OECD Test Guideline 405)

Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Respiratory or skin sensitization

Buehler Test - Guinea pig

Result: negative
(OECD Test Guideline 406)

Germ cell mutagenicity

Test Type: Ames test

Test system: Salmonella typhimurium

Result: negative

Test Type: In vitro mammalian cell gene mutation test

Test system: mouse lymphoma cells

Result: negative

Test Type: Chromosome aberration test in vitro

Test system: Human lymphocytes

Result: negative

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

Aspiration hazard

No data available

Tricosanoic acid

Acute toxicity

Oral: No data available

Inhalation: No data available

Dermal: No data available

Skin corrosion/irritation

Remarks: No data available

Serious eye damage/eye irritation

Remarks: No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

Inhalation - May cause respiratory irritation.

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

trans-cinnamic acid

Acute toxicity

LD50 Oral - Rat - 2.500 mg/kg

Remarks: (RTECS)

The value is given in analogy to the following substances: Cinnamic acid

Inhalation: No data available

LD50 Dermal - Rabbit - > 5.000 mg/kg

Remarks: (External MSDS)

Skin corrosion/irritation

Skin - in vitro test

Result: No skin irritation - 3 - 60 min

(OECD Test Guideline 431)

Serious eye damage/eye irritation

Remarks: Causes serious eye irritation.

(ECHA)

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

Test Type: Ames test

Test system: Escherichia coli/Salmonella typhimurium

Result: negative

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

indole

Acute toxicity

LD50 Oral - Rat - 1.000 mg/kg

Remarks: (RTECS)

Symptoms: Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract.

Acute toxicity estimate Oral - 1.000 mg/kg

(ATE value derived from LD50/LC50 value)

Inhalation: Irritating to respiratory system.

LD50 Dermal - Rabbit - 790 mg/kg

Remarks: (RTECS)

Acute toxicity estimate Dermal - 790 mg/kg
(ATE value derived from LD50/LC50 value)

Skin corrosion/irritation

Skin - Rabbit

Result: No skin irritation - 24 h

Remarks: (ECHA)

Serious eye damage/eye irritation

Eyes - Rabbit

Result: Causes serious eye irritation. - 24 h

Remarks: (ECHA)

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

Test Type: Ames test

Test system: Salmonella typhimurium

Result: negative

Remarks: (Lit.)

Test Type: Chromosome aberration test in vitro

Test system: Human lymphocytes

Result: negative

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

Acute oral toxicity - Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract.

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

cis-13-erucic acid

Acute toxicity

Oral: No data available

Inhalation: No data available

Dermal: No data available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

Remarks: No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

May cause respiratory irritation.

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

2-undecanone, n-**Acute toxicity**

LD50 Oral - Rat - 5.000 mg/kg

LD50 Oral - Mouse - 3.880 mg/kg

Inhalation: No data available

LD50 Dermal - Rabbit - > 5.000 mg/kg

Skin corrosion/irritation

Remarks: No data available

Serious eye damage/eye irritation

Remarks: No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

4-methyl-2-oxovaleric acid**Acute toxicity**

Oral: No data available

Inhalation: No data available

Dermal: No data available

Skin corrosion/irritation

Remarks: Causes skin burns.

Serious eye damage/eye irritation

Remarks: Causes serious eye damage.

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

lauric acid**Acute toxicity**

LD50 Oral - Rat - male and female - > 5.000 mg/kg

(OECD Test Guideline 401)

LC50 Inhalation - Rat - male and female - 4 h - > 0,162 mg/l - vapor

LD50 Dermal - Rabbit - male and female - > 2.000 mg/kg

(OECD Test Guideline 434)

Remarks: The value is given in analogy to the following substances: stearic acid

Skin corrosion/irritation

Skin - Rabbit

Result: No skin irritation - 4 h

(OECD Test Guideline 404)

Serious eye damage/eye irritation

Eyes - Rabbit

Result: Causes serious eye damage.

(OECD Test Guideline 405)

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

Test Type: Chromosome aberration test in vitro

Test system: Chinese hamster lung cells

Result: negative

Remarks: The value is given in analogy to the following substances: Docosanoic acid

Test Type: In vitro mammalian cell gene mutation test

Test system: mouse lymphoma cells

Result: negative

Remarks: The value is given in analogy to the following substances: Decanoic acid

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure**Aspiration hazard**

No data available

sodium deoxycholate**Acute toxicity**

LD50 Oral - Rat - 1.370 mg/kg

Remarks: Behavioral:Altered sleep time (including change in righting reflex).

Behavioral:Ataxia.

Lungs, Thorax, or Respiration:Other changes.

(RTECS)

Acute toxicity estimate Oral - 1.370 mg/kg

(Calculation method)

Inhalation: No data available

Dermal: No data available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Vitamin A acid**Acute toxicity**

LD50 Oral - Rat - 2.000 mg/kg

Remarks: (Lit.)

Inhalation: No data available

LD50 Dermal - Rabbit - > 2.500 mg/kg

Remarks: (External MSDS)

Skin corrosion/irritation

Remarks: Causes skin irritation.

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

May damage the unborn child.

May damage fertility.

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Bis(2-ethylhexyl) phthalate**Acute toxicity**

LD50 Oral - Rat - 30.000 mg/kg

Remarks: (RTECS)

LC0 Inhalation - Rat - male and female - 4 h - > 10,62 mg/l - vapor
(OECD Test Guideline 403)

Remarks: (highest concentration to be prepared)

LD50 Dermal - Rabbit - 19.800 mg/kg

Remarks: (ECHA)

Skin corrosion/irritation

Skin - Rabbit

Result: slight irritation - 4 h
(OECD Test Guideline 404)

Serious eye damage/eye irritation

Eyes - Rabbit

Result: No eye irritation - 72 h
(OECD Test Guideline 405)

Respiratory or skin sensitization

Maximization Test - Guinea pig

Result: negative
(OECD Test Guideline 406)

Germ cell mutagenicity

Test Type: In vitro mammalian cell gene mutation test

Test system: Mouse lymphoma test

Result: negative

Test Type: Ames test

Test system: Salmonella typhimurium

Result: negative

Test Type: Mutagenicity (mammal cell test): chromosome aberration.

Test system: Chinese hamster ovary cells

Result: negative

Test Type: sister chromatid exchange assay

Test system: Chinese hamster ovary cells

Result: negative

Test Type: Micronucleus test

Test system: Chinese hamster lung cells

Result: negative

Remarks: (ECHA)

Method: OECD Test Guideline 475

Species: Rat - male - Bone marrow

Result: negative

Method: OECD Test Guideline 486

Species: Rat - male and female - Liver cells

Result: negative

Carcinogenicity

This product is or contains a component that has been reported to be possibly carcinogenic based on its IARC, ACGIH, NTP, or EPA classification.

Reproductive toxicity

May damage the unborn child.

May damage fertility.

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

Aspiration hazard

No data available

SECTION 12: Ecological information

12.1 Toxicity

Mixture

No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Endocrine disrupting properties

Product:

Assessment : This substance/mixture contains components considered to have endocrine disrupting properties for environment , according to REACH Article 57(f), Commission Regulation (EU) 2018/605 or Commission Delegated Regulation (EU) 2017/2100.

Components:

Bis(2-ethylhexyl) phthalate:

Assessment : The substance is considered to have endocrine disrupting properties according to REACH Article 57(f) for the environment.

12.7 Other adverse effects

Very toxic to aquatic life with long lasting effects.

Components

2-Propenoic acid, 3-(4-hydroxyphenyl)-, (E)-

No data available

retinol

Toxicity to fish	static test LC50 - Danio rerio (zebra fish) - 316,23 mg/l - 96 h (OECD Test Guideline 203)
Toxicity to daphnia and other aquatic invertebrates	static test EC50 - Daphnia magna (Water flea) - > 100 mg/l - 48 h (OECD Test Guideline 202)
Toxicity to algae	static test ErC50 - Desmodesmus subspicatus (green algae) - 152,94 mg/l - 72 h (DIN 38412)
Toxicity to bacteria	static test EC50 - activated sludge - > 1.000 mg/l - 3 h (OECD Test Guideline 209)

all-trans-squalene

No data available

Ursodeoxycholic acid

Toxicity to fish	semi-static test LC50 - Danio rerio (zebra fish) - > 100 mg/l - 96 h (OECD Test Guideline 203)
Toxicity to daphnia and other aquatic invertebrates	semi-static test NOEC - Daphnia magna (Water flea) - 75,52 mg/l - 48 h (OECD Test Guideline 202)
Toxicity to algae	static test ErC50 - Pseudokirchneriella subcapitata - > 100 mg/l - 72 h (OECD Test Guideline 201)

	static test NOEC - <i>Pseudokirchneriella subcapitata</i> - 100 mg/l - 72 h (OECD Test Guideline 201)
Toxicity to bacteria	static test EC50 - activated sludge - > 1.000 mg/l - 3 h (OECD Test Guideline 209)
ergocalciferol	
No data available	
heptanoic acid; oenanthic acid	
Toxicity to fish	semi-static test LC50 - <i>Oryzias latipes</i> - 74,8 mg/l - 96 h (OECD Test Guideline 203)
Toxicity to daphnia and other aquatic invertebrates	Immobilization EC50 - <i>Daphnia magna</i> (Water flea) - 72 mg/l - 48 h (OECD Test Guideline 202)
Toxicity to algae	Growth inhibition EC50 - <i>Selenastrum capricornutum</i> (green algae) - 61,2 mg/l - 72 h (OECD Test Guideline 201)
Toxicity to daphnia and other aquatic invertebrates(Chronic toxicity)	NOEC - <i>Daphnia magna</i> (Water flea) - 40 mg/l - 21 d (OECD Test Guideline 211)
nonanoic acid	
Toxicity to fish	static test LC50 - <i>Oncorhynchus mykiss</i> (rainbow trout) - 91 mg/l - 96 h (US-EPA)
Toxicity to daphnia and other aquatic invertebrates	static test EC50 - <i>Daphnia magna</i> (Water flea) - 96 mg/l - 48 h (US-EPA)
Toxicity to algae	static test ErC50 - <i>Pseudokirchneriella subcapitata</i> (green algae) - 25 mg/l - 72 h (OECD Test Guideline 201)
	static test NOEC - <i>Pseudokirchneriella subcapitata</i> (green algae) - 5,66 mg/l - 72 h (OECD Test Guideline 201)
Octanoic acid	
Toxicity to fish	static test LC50 - <i>Lepomis macrochirus</i> (Bluegill sunfish) - 22 mg/l - 96 h (US-EPA)
Toxicity to daphnia and other aquatic invertebrates	static test EC50 - <i>Daphnia magna</i> (Water flea) - > 21 mg/l - 48 h (OECD Test Guideline 202)
Toxicity to algae	static test ErC50 - <i>Pseudokirchneriella subcapitata</i> (green algae) - 43,73 mg/l - 72 h (OECD Test Guideline 201)
Toxicity to bacteria	static test EC10 - <i>Pseudomonas putida</i> - 912 mg/l - 18 h

(ISO 10712)

Toxicity to fish(Chronic toxicity) flow-through test LC50 - Danio rerio (zebra fish) - 9,8 mg/l - 28 d
Remarks: (ECHA)

Toxicity to daphnia and other aquatic invertebrates(Chronic toxicity) semi-static test LC50 - Daphnia magna (Water flea) - 20 mg/l - 21 d
(OECD Test Guideline 211)

(Z)-Hexadec-9-enoic acid

No data available

Chenodeoxycholic acid

Toxicity to fish semi-static test LC50 - Danio rerio (zebra fish) - > 100 mg/l - 96 h
(OECD Test Guideline 203)
Remarks: (in analogy to similar products)

Toxicity to algae static test ErC50 - Pseudokirchneriella subcapitata - > 100 mg/l - 72 h
(OECD Test Guideline 201)
Remarks: (in analogy to similar products)

Toxicity to bacteria Remarks: (in analogy to similar products)

3,3'-(3,7,12,17-Tetramethyl-8,13-divinylporphine-2,18-diyl)di(propionic acid)

No data available

α -estradiol

No data available

1-Hydroxy-2-naphthoesäure

No data available

D-(+)-erythro-4-trans-Sphingenine

No data available

quinoline

Toxicity to fish semi-static test LC50 - Poecilia reticulata (guppy) - 29,9 mg/l - 96 h
(OECD Test Guideline 203)

Toxicity to bacteria

Toxicity to daphnia and other aquatic invertebrates(Chronic toxicity) semi-static test NOEC - Daphnia magna (Water flea) - 0,8 mg/l - 21 d
Remarks: (ECHA)

Vitamin A palmitate

Toxicity to fish	static test LC50 - <i>Leuciscus idus</i> (Golden orfe) - > 10.000 mg/l - 96 h (DIN 38412)
Toxicity to daphnia and other aquatic invertebrates	static test EC50 - <i>Daphnia magna</i> (Water flea) - 35,34 mg/l - 48 h (OECD Test Guideline 202)
Toxicity to algae	static test ErC50 - <i>Desmodesmus subspicatus</i> (green algae) - 152,94 mg/l - 72 h Remarks: (ECHA)

cortisone

No data available

L-thyroxine

Toxicity to daphnia and other aquatic invertebrates	static test - <i>Daphnia magna</i> (Water flea) - > 100 mg/l - 48 h (OECD Test Guideline 202)
Toxicity to algae	static test ErC50 - <i>Raphidocelis subcapitata</i> (freshwater green alga) - > 1,04 mg/l - 72 h (OECD Test Guideline 201) static test NOEC - <i>Raphidocelis subcapitata</i> (freshwater green alga) - 1,04 mg/l - 72 h (OECD Test Guideline 201)

Icosanoic acid

No toxicity at the limit of solubility.

Toxicity to bacteria	Remarks: (ECHA)
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Gamma-linolenic acid

No data available

Decanoic acid

Toxicity to daphnia and other aquatic invertebrates	static test EC50 - <i>Daphnia magna</i> (Water flea) - > 20 mg/l - 48 h (OECD Test Guideline 202)
Toxicity to algae	static test ErC50 - <i>Pseudokirchneriella subcapitata</i> (green algae) - 15 mg/l - 72 h (OECD Test Guideline 201) static test NOEC - <i>Pseudokirchneriella subcapitata</i> (green algae) - 3,2 mg/l - 72 h (OECD Test Guideline 201)
Toxicity to fish(Chronic toxicity)	flow-through test NOEC - <i>Danio rerio</i> (zebra fish) - 2 mg/l - 28 d Remarks: (ECHA)

Toxicity to daphnia and other aquatic invertebrates(Chronic toxicity)	semi-static test NOEC - Daphnia magna (Water flea) - 0,2 mg/l - 21 d (OECD Test Guideline 211)
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Tricosanoic acid

No data available

trans-cinnamic acid

Toxicity to daphnia and other aquatic invertebrates	semi-static test EC50 - Daphnia magna (Water flea) - 32 mg/l - 48 h (OECD Test Guideline 202)
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Toxicity to algae	static test ErC50 - Pseudokirchneriella subcapitata (green algae) - 19 mg/l - 72 h (OECD Test Guideline 201)
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indole

Toxicity to daphnia and other aquatic invertebrates	EC50 - Daphnia magna (Water flea) - 1 mg/l - 48 h Remarks: (Lit.)
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Toxicity to algae	static test EC50 - Scenedesmus acuminatus - 9,42 mg/l - 96 h Remarks: (ECHA)
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Toxicity to bacteria	microtox test EC50 - Photobacterium phosphoreum - 2,4 mg/l - 30 min Remarks: (Lit.)
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cis-13-erucic acid

No data available

2-undecanone, n-

Toxicity to fish	LC50 - Pimephales promelas (fathead minnow) - 2,5 mg/l - 96,0 h
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Toxicity to daphnia and other aquatic invertebrates	EC50 - Daphnia magna (Water flea) - 0,54 mg/l - 48 h
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4-methyl-2-oxovaleric acid

No data available

lauric acid

Toxicity to fish	semi-static test LC50 - Oryzias latipes (Orange-red killifish) - 5 mg/l - 96 h (OECD Test Guideline 203)
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Toxicity to daphnia and other aquatic invertebrates	semi-static test EC50 - Daphnia magna (Water flea) - 3,6 mg/l - 48 h (OECD Test Guideline 202)
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Toxicity to algae	static test ErC50 - <i>Pseudokirchneriella subcapitata</i> - > 7,6 mg/l - 72 h (OECD Test Guideline 201) Remarks: (above the solubility limit in the test medium)
Toxicity to bacteria	static test EC10 - <i>Pseudomonas putida</i> - > 1.000 mg/l - 30 min (OECD Test Guideline 209)
Toxicity to fish(Chronic toxicity)	flow-through test LC50 - <i>Danio rerio</i> (zebra fish) - 9,8 mg/l - 28 d Remarks: (ECHA)

sodium deoxycholate

Toxicity to fish	LC50 - <i>Oryzias latipes</i> - 115 mg/l - 48 h Remarks: (ECOTOX Database)
Toxicity to algae	- <i>Pseudokirchneriella subcapitata</i> (green algae) - 100 - 500 mg/l - 21 d Remarks: (ECOTOX Database)

Vitamin A acid

Toxicity to fish	LC50 - <i>Danio rerio</i> (zebra fish) - 0,00147 mg/l - 96 h Remarks: (ECOTOX Database)
Toxicity to daphnia and other aquatic invertebrates(Chronic toxicity)	NOEC - <i>Daphnia pulex</i> (Water flea) - 0,0001 mg/l Remarks: (ECOTOX Database)

Bis(2-ethylhexyl) phthalate

Toxicity to fish	flow-through test LC50 - <i>Pimephales promelas</i> (fathead minnow) - > 0,67 mg/l - 96 h (OECD Test Guideline 203) Remarks: (above the solubility limit in the test medium)
Toxicity to daphnia and other aquatic invertebrates	EC50 - <i>Daphnia magna</i> (Water flea) - > 0,16 mg/l - 48 h Remarks: (ECOTOX Database)
Toxicity to algae	EC50 - <i>Pseudokirchneriella subcapitata</i> - > 0,003 mg/l - 72 h (OECD Test Guideline 201)
Toxicity to bacteria	static test NOEC - activated sludge - 1.000 mg/l - 3 h (OECD Test Guideline 209)
Toxicity to fish(Chronic toxicity)	flow-through test NOEC - <i>Pimephales promelas</i> (fathead minnow) - 23,8 mg/l - 32 d Remarks: (above the solubility limit in the test medium) (ECOTOX Database)

Toxicity to daphnia and other aquatic invertebrates(Chronic toxicity)	flow-through test NOEC - Daphnia magna (Water flea) - 0,158 mg/l - 21 d (OECD Test Guideline 211) Remarks: (above the solubility limit in the test medium)
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SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information

14.1 UN number

ADR/RID: 3082

IMDG: 3082

IATA: 3082

14.2 UN proper shipping name

ADR/RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (α-estradiol)

IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (α-estradiol)

IATA: Environmentally hazardous substance, liquid, n.o.s. (α-estradiol)

14.3 Transport hazard class(es)

ADR/RID: 9

IMDG: 9

IATA: 9

14.4 Packaging group

ADR/RID: III

IMDG: III

IATA: III

14.5 Environmental hazards

ADR/RID: yes

IMDG Marine pollutant: yes

IATA: yes

14.6 Special precautions for user

Tunnel restriction code : (-)

Further information

EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packagings and combination packagings containing inner packagings with Dangerous Goods > 5L for liquids or > 5kg for solids. Packages smaller than or equal to 5 kg / L , not dangerous goods of Class 9

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

Authorisations and/or restrictions on use

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII) : Quinoline

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII) : quinoline

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII) : Bis(2-ethylhexyl) phthalate

Regulation (EU) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals : Ergocalciferol

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII) : Bis(2-ethylhexyl) phthalate

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII) : quinoline

This product contains a substance listed on Annex XIV of the REACH Regulation (EC) Nr. 1907/2006.

Listed substance / Sunset Date : Bis(2-ethylhexyl) phthalate

After the sunset date the use of this substance requires either an authorization or can only be used for exempted uses, e.g. use in scientific research and development which includes routine analytics or use as intermediate.

National legislation

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances. E1 ENVIRONMENTAL HAZARDS

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

SECTION 16: Other information

Full text of H-Statements

H301 Toxic if swallowed.
H302 Harmful if swallowed.

H304	May be fatal if swallowed and enters airways.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
H351	Suspected of causing cancer.
H360D	May damage the unborn child.
H360F	May damage fertility.
H360FD	May damage fertility. May damage the unborn child.
H361d	Suspected of damaging the unborn child.
H362	May cause harm to breast-fed children.
H372	Causes damage to organs through prolonged or repeated exposure if swallowed.
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.
H412	Harmful to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.

CHEMIKART

Full text of other abbreviations

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Classification of the mixture

Acute Tox.4	H332
Skin Irrit.2	H315
Eye Dam.1	H318
Skin Sens.1	H317
Muta.2	H341
Carc.1B	H350
Repr.1A	H360FD
Lact.	H362
STOT RE2	H373
STOT RE2	H373
Aquatic Acute1	H400
Aquatic Chronic1	H410

Classification procedure:

Calculation method
Calculation method
Calculation method
Calculation method
Calculation method
Calculation method
Calculation method
Calculation method
Calculation method
Calculation method
Calculation method

Further information

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