Kemetyl

# Safety data sheet

According to Regulation (EU) No 2015/830

## SECTION 1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. Product identifier

Product name : SHELL AIRFRESHENER ENERGY RELOAD
Product code : CRX782, AL53D

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

Application : SU21 Consumer product. PC3 Air care products. Airfreshener.

### 1.3. Details of the supplier of the safety data sheet

Supplier : Kemetyl Nederland BV
Industrieweg 30
3762 EK Soest, The Netherlands
Telephone : +31-35 7604900
E-mail : msds@kemetyl.com
Website : www.kemetyl.com

### 1.4. Emergency telephone number

EMERGENCY TELEPHONE NUMBER, for DOCTORS/FIRE BRIGADE/POLICE only:
NL - Telephone : +31-35-6099310 (During office hours only)

## SECTION 2 HAZARDS IDENTIFICATION *

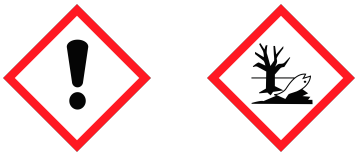
### 2.1. Classification of the substance or mixture

CLP classification (1272/2008/EC) : Skin irritation, category 2. Eye irritation, category 2. Skin sensitization, category 1. Hazardous to the aquatic environment — Chronic category 2.

Human health hazards : Causes skin irritation. Causes serious eye irritation. May cause an allergic skin reaction.
Physical/chemical hazards : Not classified as dangerous according to statutory EC-Directives. Combustible.
Environmental hazards : Toxic to aquatic life with long lasting effects.

### 2.2. Label elements

Label elements (1272/2008/EC):
Hazard pictograms :



Signal word : Warning

H- and P-phrases :

| | |
|---|---|
| H315 | Causes skin irritation. |
| H319 | Causes serious eye irritation. |
| H317 | May cause an allergic skin reaction. |
| H411 | Toxic to aquatic life with long lasting effects. |
| P101 | If medical advice is needed, have product container or label at hand. |
| P102 | Keep out of reach of children. |
| P280 hands eyes | Wear protective gloves and eye protection. |
| P273 | Avoid release to the environment. |
| P391 | Collect spillage. |

| | |
|---|---|
| P501 | Dispose of contents/container to an official chemical waste depot. |

Labelling of packagings where the contents do not exceed 125 ml and it is technically impossible to list all phrases:

Hazard pictograms :

Signal word : Warning

H- and P-phrases :

| | |
|---|---|
| H317 | May cause an allergic skin reaction. |
| P101 | If medical advice is needed, have product container or label at hand. |
| P102 | Keep out of reach of children. |
| P280 gloves | Wear protective gloves. |
| P273 | Avoid release to the environment. |
| P391 | Collect spillage. |
| P501 | Dispose of contents/container to an official chemical waste depot. |

Additional labelling (for all packaging sizes)

: Contains: Linalyl acetate ; Hexyl salicylate ; 3,7-Dimethyloctan-3-ol ; 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphtyl)ethan-1-one ; Cedryl methyl ketone ; Cineole ; 4-Allylanisole ; 2,4-Dimethylcyclohex-3-ene-1-carbaldehyde .

### 2.3. Other hazards

Other information : Does not contain PBT or vPvB substances in concentrations higher than 0,1%.

## SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS *

### 3.2. Mixtures

Product description : Mixture.

Information on hazardous substances:

| Substance name | Concentration (w/w) (%) | CAS nr. | EC number | Remark | REACH nr. |
|---|---|---|---|---|---|
| 2,6-Dimethyloct-7-en-2-ol | 5 - < 15 | 18479-58-8 | 242-362-4 | | |
| Linalyl acetate | 1 - < 5 | 115-95-7 | 204-116-4 | | |
| Hexyl salicylate | 2,5 - < 5 | 6259-76-3 | 228-408-6 | | |
| 3,7-Dimethyloctan-3-ol | 1 - < 5 | 78-69-3 | 201-133-9 | | |
| 3,7-Dimethylnona-1,6-dien-3-ol | 1 - < 5 | 10339-55-6 | 233-732-6 | | |
| 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphtyl)ethan-1-one | 1 - < 2,5 | 54464-57-2 | 259-174-3 | | |
| Cedryl methyl ketone | 0,25 - < 1 | 32388-55-9 | 251-020-3 | | |
| Cineole | 0,1 - < 1 | 470-82-6 | 207-431-5 | | |
| 4-Allylanisole | 0,1 - < 1 | 140-67-0 | 205-427-8 | | |
| [3R-(3α,3aβ,7β,8aα)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one | 0,1 - < 0,25 | 469-61-4 | 207-418-4 | | |
| 2,4-Dimethylcyclohex-3-ene-1-carbaldehyde | 0,1 - < 1 | 68039-49-6 | 268-264-1 | | |

| Substance name | Hazard Class | H-phrases | Pictograms | |
|---|---|---|---|---|
| 2,6-Dimethyloct-7-en-2-ol | Eye Irrit. 2; Skin Irrit. 2 | H315; H319 | GHS07 | |
| Linalyl acetate | Eye Irrit. 2; Skin Irrit. 2; Skin Sens. 1B | H315; H317; H319 | GHS07 | |

| | | | | |
|---|---|---|---|---|
| Hexyl salicylate | Aquatic Acute 1; Aquatic Chronic 1; Skin Irrit. 2; Skin Sens. 1B | H315; H317; H400; H410 | GHS07; GHS09 | M (acute) = 1<br>M (chronic) = 1 |
| 3,7-Dimethyloctan-3-ol | Eye Irrit. 2; Skin Irrit. 2; Skin Sens. 1B | H315; H317; H319 | GHS07 | |
| 3,7-Dimethylnona-1,6-dien-3-ol | Eye Irrit. 2; Skin Irrit. 2 | H315; H319 | GHS07 | |
| 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphtyl)ethan-1-one | Aquatic Chronic 1; Skin Irrit. 2; Skin Sens. 1B | H315; H317; H410 | GHS07; GHS09 | M (chronic) = 1 |
| Cedryl methyl ketone | Aquatic Acute 1; Aquatic Chronic 1; Skin Sens. 1B | H317; H400; H410 | GHS07; GHS09 | M (acute) = 1<br>M (chronic) = 1 |
| Cineole | Flam. Liq. 3; Skin Sens. 1B | H226; H317 | GHS02; GHS07 | |
| 4-Allylanisole | Acute Tox. 4; Carc. 2; Muta. 2; Skin Sens. 1B | H302; H317; H341; H351 | GHS07 | |
| [3R-(3α,3aβ,7β,8aα)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one | Aquatic Acute 1; Aquatic Chronic 1; Asp. Tox. 1 | H304; H400; H410 | GHS08; GHS09 | M (acute) = 10<br>M (chronic) = 10 |
| 2,4-Dimethylcyclohex-3-ene-1-carbaldehyde | Aquatic Chronic 2; Eye Irrit. 2; Skin Irrit. 2; Skin Sens. 1B | H315; H317; H319; H411 | GHS07; GHS09 | |

Reference is made to chapter 16 for full text of each relevant H phrase.

## SECTION 4 FIRST-AID MEASURES

### 4.1. Description of first aid measures

First aid measures

Inhalation : Not applicable under normal conditions of use. Consult a doctor if victim feels unwell.

Skin contact : Take off contaminated clothing. Wash off skin with plenty of water and soap before product dries up. Consult a doctor if irritation occurs.

Eye contact : Wash out with (lukewarm) water. Remove contact lenses. Consult a doctor.

Ingestion : Do not induce vomiting. Do rinse the mouth. Give one glass of water. Never give anything by mouth to an unconscious person. Consult a doctor if victim feels unwell.

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

Effects and symptoms

Inhalation : No specific effects and/or symptoms are known.

Skin contact : Irritant. May cause redness and irritation, sensitisation. May produce an allergic reaction. May cause dry skin.

Eye contact : Irritant. May cause redness and pain.

Ingestion : May cause a feeling of sickness, vomiting and diarrhoea.

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

Note to physicians : None known.

## SECTION 5 FIRE-FIGHTING MEASURES

### 5.1. Extinguishing media

Extinguishing media

Suitable : Carbondioxide ($CO_2$). Foam. Dry chemical. Water fog.

Not suitable : Water jet.

### 5.2. Special hazards arising from the substance or mixture

Special exposure hazards : None known.
Hazardous thermal decomposition products : Carbon monoxide may be evolved if incomplete combustion occurs.

### 5.3. Advice for firefighters

Special protective equipment for fire-fighters : Use adequate respiratory equipment in case of insufficient ventilation.

## SECTION 6 ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions : Danger of slipping. Clean up spills immediately. Wear shoes with non-slip soles. Avoid contact with spilled or released material. Vapours are heavier than air. Build up (of gasses) in low areas involves risk of suffocation.

### 6.2. Environmental precautions

Environmental precautions : Avoid release of product into sewers, surface water and/or ground water. In case of large spills: contain with dike. Waste product should not be allowed to contaminate soil or water.
Other information : Notify authorities if any exposure to the general public or the environment occurs or is likely to occur.

### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Collect spilled material in containers. Dispose at an authorised waste collection point. Wash away remainder with plenty of water and soap.

### 6.4. Reference to other sections

Reference to other sections : See also section 8.

## SECTION 7 HANDLING AND STORAGE

### 7.1. Precautions for safe handling

Handling : Handle in accordance with good occupational hygiene and safety practices in well-ventilated areas. Keep away from sources of ignition — No smoking. Avoid contact with skin and eyes. Avoid splashing. Wear protective clothing.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage : Keep frost-free, in a cool, dry and well-ventilated place (< 35 °C). Keep away from oxidizing agents.
Recommended packaging : Keep only in the original container.
Non recommended packaging : None known.

### 7.3. Specific end use(s)

Use : Use only as directed.

## SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control parameters

Occupational exposure limits : Occupational exposure limits have not been established for this product. Derived no-effect levels (DNEL) have not been established for this product. Predicted no-effect concentrations (PNEC) have not been established for this product.

Derived no-effect level (DNEL) for workers:

| Chemical name | Route of exposure | DNEL, short-term | | DNEL, long-term | |
|---|---|---|---|---|---|
| | | Local effect | Systemic effect | Local effect | Systemic effect |
| 2,6-Dimethyloct-7-en-2-ol | Dermal | | | | 20,8 mg/kg bw/day |
| | Inhalation | | | | 73,5 mg/m3 |
| Linalyl acetate | Dermal | 0,2362 mg/kg bw | | 0,2362 mg/kg bw/day | 2,5 mg/kg bw/day |
| | Inhalation | | | | 2,75 mg/m3 |
| Hexyl salicylate | Dermal | | 2083 mg/kg bw | | 2083 mg/kg bw/day |
| | Inhalation | | 0,729 mg/m3 | | 0,729 mg/m3 |
| 3,7-Dimethyloctan-3-ol | Inhalation | | | | 2,75 mg/m3 |
| | Dermal | | | | 2,5 mg/kg bw/day |
| 3,7-Dimethylnona-1,6-dien-3-ol | Inhalation | | 18 mg/m3 | | 3 mg/m3 |
| | Dermal | 16 mg/kg bw | 5,5 mg/kg bw | 16 mg/kg bw/day | 2,7 mg/kg bw/day |
| 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphtyl)ethan-1-one | Inhalation | | | | 1,76 mg/m3 |
| | Dermal | 0,1011 mg/kg bw | | | 1,73 mg/kg bw/day |
| Cedryl methyl ketone | Inhalation | | | | 1,17 mg/m3 |
| | Dermal | | | | 0,333 mg/kg bw/day |
| Cineole | Inhalation | | | | 7,05 mg/m3 |
| | Dermal | | | | 2 mg/kg bw/day |
| 2,4-Dimethylcyclohex-3-ene-1-carbaldehyde | Inhalation | | | | 0,44 mg/m3 |
| | Dermal | | | | 0,125 mg/kg bw/day |

Derived no-effect level (DNEL) for consumers:

| Chemical name | Route of exposure | DNEL, short-term | | DNEL, long-term | |
|---|---|---|---|---|---|
| | | Local effect | Systemic effect | Local effect | Systemic effect |
| 2,6-Dimethyloct-7-en-2-ol | Dermal | | | | 12,5 mg/kg bw/day |
| | Inhalation | | | | 21,7 mg/m3 |
| | Oral | | | | 12,5 mg/kg bw/day |
| Linalyl acetate | Dermal | 0,2362 mg/kg bw | | 0,2362 mg/kg bw/day | 1,25 mg/kg bw/day |
| | Inhalation | | | | 0,68 mg/m3 |
| | Oral | | | | 0,2 mg/kg bw/day |
| Hexyl salicylate | Dermal | | 1250 mg/kg bw | | 1250 mg/kg bw/day |
| | Inhalation | | 0,219 mg/m3 | | 0,219 mg/m3 |
| | Oral | | 0,0625 mg/kg bw | | 0,0625 mg/kg bw/day |
| 3,7-Dimethyloctan-3-ol | Inhalation | | | | 0,68 mg/m3 |
| | Dermal | | | | 1,25 mg/kg bw/day |
| | Oral | | | | 0,2 mg/kg bw/day |
| 3,7-Dimethylnona-1,6-dien-3-ol | Inhalation | | 4,4 mg/m3 | | 0,74 mg/m3 |
| | Dermal | 16 mg/kg bw | 2,7 mg/kg bw | 16 mg/kg bw/day | 1,4 mg/kg bw/day |
| | Oral | | 1,3 mg/kg bw | | 0,2 mg/kg bw/day |
| 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphtyl)ethan-1-one | Inhalation | | | | 0,43 mg/m3 |
| | Dermal | 0,0506 mg/kg bw | | | 0,86 mg/kg bw/day |

| | | | | | |
|---|---|---|---|---|---|
| | Oral | | | | 0,25 mg/kg bw/day |
| Cedryl methyl ketone | Inhalation | | | | 0,29 mg/m3 |
| | Dermal | | | | 0,167 mg/kg bw/day |
| | Oral | | | | 0,167 mg/kg bw/day |
| Cineole | Inhalation | | | | 1,74 mg/m3 |
| | Dermal | | | | 1 mg/kg bw/day |
| | Oral | | | | 600 mg/kg bw/day |
| 2,4-Dimethylcyclohex-3-ene-1-car-baldehyde | Inhalation | | | | 0,108 mg/m3 |
| | Dermal | | | | 0,062 mg/kg bw/day |
| | Oral | | | | 0,062 mg/kg bw/day |

Predicted no-effect concentration (PNEC):

| Chemical name | Route of exposure | Fresh water | Marine water | |
|---|---|---|---|---|
| 2,6-Dimethyloct-7-en-2-ol | Water | 0,0278 mg/l | 0,0027 mg/l | |
| | Sediment | 0,594 mg/kg | 0,0594 mg/kg | |
| | Intermittent water | | | 0,278 mg/l |
| | STP | | | 10 mg/l |
| | Soil | | | 0,103 mg/kg |
| | Oral | | | 111 mg/kg food |
| Linalyl acetate | Water | 0,011 mg/l | 0,001 mg/l | |
| | Sediment | 0,609 mg/kg | 0,061 mg/kg | |
| | Intermittent water | | | 0,11 mg/l |
| | STP | | | 1 mg/l |
| | Soil | | | 0,115 mg/kg |
| Hexyl salicylate | Water | 0,000357 mg/l | 0,0001 mg/l | |
| | Sediment | 0,272 mg/kg | 0,0272 mg/kg | |
| | Intermittent water | | | 0,0036 mg/l |
| | STP | | | 10 mg/l |
| | Soil | | | 0,0542 mg/kg |
| 3,7-Dimethyloctan-3-ol | Water | 0,0089 mg/l | 0,00089 mg/l | |
| | Sediment | 0,0821 mg/kg | 0,00821 mg/kg | |
| | Intermittent water | | | 0,089 mg/l |
| | STP | | | 450 mg/l |
| | Soil | | | 0,0112 mg/kg |
| 3,7-Dimethylnona-1,6-dien-3-ol | Water | 0,023 mg/l | 0,0023 mg/l | |
| | Sediment | 0,223 mg/kg | 0,0223 mg/kg | |
| | Intermittent water | | | 0,23 mg/l |
| | STP | | | 10 mg/l |
| | Soil | | | 0,031 mg/kg |
| | Oral | | | 8,53 mg/kg food |
| Cedryl methyl ketone | Water | 0.00174 mg/l | 0.000174 mg/l | |
| | Sediment | 24.4 mg/kg | 2.44 mg/kg | |
| | STP | | | 10 mg/l |
| | Soil | | | 4.87 mg/kg |
| Cineole | Water | 0,057 mg/l | 0,0057 mg/l | |
| | Sediment | 1,425 mg/kg | 0,1425 mg/kg | |
| | Intermittent water | | | 0,57 mg/l |
| | STP | | | 10 mg/l |
| | Soil | | | 0,25 mg/kg |
| | Oral | | | 133 mg/kg food |
| 2,4-Dimethylcyclohex-3-ene-1-carbaldehyde | Water | 0,0075 mg/l | 0,00075 mg/l | |
| | Sediment | 0,226 mg/kg | 0,0226 mg/kg | |
| | Intermittent water | | | 0,075 mg/l |
| | STP | | | 10 mg/l |

| | | | | |
|---|---|---|---|---|
| | Soil | | | 0,0408 mg/kg |

### 8.2. Exposure controls

Engineering measures : Comply with standard precautionary measures for working with chemicals.
Hygienic measures : When using do not eat, drink or smoke.

Personal protective equipment:
The efficiency of personal protective equipment depends among other things on temperature and degree of ventilation. Always get professional advice for the particular local situation.

:

Body protection : Wear appropriate protective clothing, overalls or suit, and similar boots in accordance with EN 365/367 resp. 345. Suitable material: laminated film. Indication of permeation breakthrough time: 4 hours.

Respiratory protection : Take care of sufficient ventilation. Wear suitable respiratory protection in case of large scale exposure. Suitable: gas filter type A (brown), class I or higher on e.g. a facemask in accordance with EN 140.

Hand protection : Wear appropriate safety gloves in accordance with EN 374. Suitable material: laminated film. ± 0,5 mm. Indication of permeation breakthrough time: 4 hours.

Eye protection : Wear appropriate safety glasses with side shields, in accordance with EN 166, when there is danger of possible eye contact.

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

| | | |
|---|---|---|
| Appearance | : Liquid. | Impregnated material. |
| Colour | : Light yellow. | |
| Odour | : Perfumed. | |
| Odour threshold | : Not known. | |
| pH | : Not applicable. | Waterfree product. |
| Solubility in water | : Not soluble. | |
| Partition coefficient (n-octanol/water) | : Not known. | Not measured. Not relevant for mixtures. |
| Flash point | : 96 °C | |
| Flammability (solid, gas) | : Not applicable. | Liquid. See flashpoint. |
| Auto ignition temperature | : > 225 °C | |
| Boiling point/boiling range | : > 100 °C | |
| Melting point/melting range | : < 0 °C | |
| Explosive properties | : None known. | Does not contain explosives. |
| Explosion limits (% in air) | : Not known. | Lower explosion limit in air (%): 0,7 ( Linalyl acetate ) |
| | : | Upper explosion limit in air (%): 4,3 ( Linalyl acetate ) |
| Oxidising properties | : Not applicable. | Does not contain oxidizing substances. |
| Decomposition temperature | : Not applicable. | |
| Viscosity (20°C) | : Not known. | |
| Viscosity (40°C) | : Not relevant. | The product contains < 10% substances having an aspiration hazard. |
| Vapour pressure (20°C) | : Not known. | |
| Vapour density (20°C) | : > 1 | (air = 1) |
| Relative density (20°C) | : 0,98 g/ml | |
| Evaporation rate | : Not known. | (n-butyl acetate = 1) |

### 9.2. Other information

Other information : Not relevant.

## SECTION 10 STABILITY AND REACTIVITY

### 10.1. Reactivity

Reactivity : See sub-sections below.

### 10.2. Chemical stability

Stability : Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

Reactivity : No other hazardous reactions known.

### 10.4. Conditions to avoid

Conditions to avoid : See section 7.

### 10.5. Incompatible materials

Materials to avoid : Keep away from oxidizing agents.

### 10.6. Hazardous decomposition products

Hazardous decomposition products : Not known.

## SECTION 11 TOXICOLOGICAL INFORMATION *

### 11.1. Information on toxicological effects

No toxicological research has been carried out on this product.

Inhalation

Acute toxicity : Calculated LC50: > 10 mg/l. Ingredients of unknown toxicity: 18 %. ATE: > 5 mg/l. Low toxicity. Not classified - based on available data, the classification criteria are not met.

Corrosion/irritation : Not classified - based on available data, the classification criteria are not met.

Sensitisation : Does not contain substances classified as respiratory sensitiser. Not classified - based on available data, the classification criteria are not met.

Carcinogenicity : Not expected to be carcinogenic. Not classified - based on available data, the classification criteria are not met.

Mutagenicity : Not expected to be mutagenic. Not classified - based on available data, the classification criteria are not met.

Skin contact

Acute toxicity : Calculated LD50: > 5000 mg/kg.bw. Ingredients of unknown toxicity: < 1 %. ATE: > 2000 mg/kg.bw. Low toxicity. Not classified - based on available data, the classification criteria are not met.

Corrosion/irritation : Irritant. May cause redness. Prolonged contact may dry out and defat the skin.

Sensitisation : May cause sensitisation by skin contact. May produce an allergic reaction.

Mutagenicity : Does not contain mutagenic substances. Not classified - based on available data, the classification criteria are not met.

Eye contact

Corrosion/irritation : Irritant.

Ingestion

Acute toxicity : Calculated LD50: > 5000 mg/kg.bw. Ingredients of unknown toxicity: < 1 %. ATE: > 2000 mg/kg.bw. Low toxicity. Not classified - based on available data, the classification criteria are not met.

| | | |
|---|---|---|
| Aspiration | : | Not expected to be an aspiration hazard. Contains a substance/substances with an aspiration hazard. Not classified - based on available data, the classification criteria are not met. |
| Corrosion/irritation | : | May cause a feeling of sickness, vomiting and diarrhoea. |
| Carcinogenicity | : | Not expected to be carcinogenic. Not classified - based on available data, the classification criteria are not met. |
| Mutagenicity | : | Not expected to be mutagenic. Not classified - based on available data, the classification criteria are not met. |
| Reprotoxicity | : | Development: Not expected to be reprotoxic. Development: Not classified - Based on available data, the classification criteria are not met. Fertility: not expected to be reprotoxic. Fertility: Not classified - based on available data, the classification criteria are not met. |

Toxicological information:

| Chemical name | Property | | Method | Test animal |
|---|---|---|---|---|
| 2,6-Dimethyloct-7-en-2-ol | NOAEL (development) - estimate | 1000 mg/kg.d | Read across | Rat |
| | Mutagenicity | Not mutagenic | OECD 471 | |
| | Genotoxicity - in vitro | Not genotoxic | OECD 476 | |
| | NOAEL (oral) - estimate | 500 mg/kg bw/d | Read across | Rat |
| | LD50 (oral) | 3600 mg/kg bw | ----- | Rat |
| | Skin sensitisation | Not sensitizing | | |
| | Skin irritation | Slightly irritant | ----- | Rabbit |
| | Eye irritation | Moderately irritant | OECD 405 | Rabbit |
| | LD50 (dermal) | > 5000 mg/kg bw | ----- | Rabbit |
| Linalyl acetate | | 1000 mg/kg bw/d | OECD 414 | Rat |
| | LD50 (oral) | 13934 mg/kg bw | ----- | Rat |
| | LC50 (inhalation) | > 2740 mg/m3 | ----- | Mouse |
| | Skin irritation | Non-irritant | ----- | Human |
| | Skin irritation | Irritant | OECD 404 | Rabbit |
| | Eye irritation | Irritant | OECD 405 | Rabbit |
| | NOAEL (oral) | 160 mg/kg bw/d | OECD 407 | Rat |
| | NOAEL (dermal) | 250 mg/kg bw/d | OECD 411 | Rat |
| | Mutagenicity | Not mutagenic | OECD 471 | Salmonella typhimurium |
| | Genotoxicity - in vitro | Not genotoxic | OECD 476 | Mouse |
| | Genotoxicity - in vivo | Not genotoxic | OECD 474 | Mouse |
| | NOAEL (development, oral) | > 1000 mg/kg bw/d | OECD 414 | Rat |
| | LC50 (inhalation) - estimate | > 5000 mg/m3 | ----- | Rat |
| | Skin sensitisation | Sensitizing | OECD 429 | Mouse |
| Hexyl salicylate | LD50 (oral) | > 5000 mg/kg bw | ----- | Rat |
| | LD50 (dermal) | > 5000 mg/kg bw | | Rabbit |
| | NOAEL (oral) - estimate | 50 mg/kg bw/d | Read across | |
| | Mutagenicity | Negative | OECD 471 | Salmonella typhimurium |
| | Genotoxicity - in vitro | Not genotoxic | OECD 476 | Chinese Hamster |
| | Genotoxicity - in vivo | Not genotoxic | ----- | Mouse |
| | NOAEL (development) - estimate | Not teratogenic | Read across | |
| | NOAEL (fertility) - estimate | Not reprotoxic | Read across | |
| | Eye irritation | Non-irritant | OECD 405 | Rabbit |
| | Skin irritation | Moderately irritant | OECD 404 | Rabbit |
| 3,7-Dimethyloctan-3-ol | LD50 (oral) | 8270 mg/kg bw | | Rat |
| | LD50 (dermal) | > 5000 mg/kg bw | | Rabbit |
| | Mutagenicity | Negative | OECD 471 | Salmonella typhimurium |

| | | | | |
|---|---|---|---|---|
| | Genotoxicity - in vitro | Not genotoxic | OECD 473 | |
| | NOAEL (oral) - estimate | 200 mg/kg bw/d | Read across | Rat |
| | NOAEL (dermal) - estimate | 250 mg/kg bw/d | Read across | Rat |
| | NOAEL (fertility) - estimate | 365 mg/kg.d | Read across | Rat |
| | NOAEL (development, oral) | 1000 mg/kg bw/d | OECD 414 | Rat |
| | Skin irritation | Irritant | | Rabbit |
| | Eye irritation | Non-irritant | | Rabbit |
| | LC50 (inhalation) - estimate | > 5000 mg/m3 | | Rat |
| | Skin sensitisation | Sensitizing | OECD 429 | Mouse |
| 3,7-Dimethylnona-1,6-dien-3-ol | LD50 (oral) | 5000 mg/kg bw | ----- | Rat |
| | LD50 (dermal) | > 5000 mg/kg bw | ----- | Rabbit |
| | NOAEL (oral) - estimate | 117 mg/kg bw/d | Read across | Rat |
| | NOAEL (dermal) - estimate | 250 mg/kg bw/d | Read across | Rat |
| | Mutagenicity | Not mutagenic | OECD 471 | Salmonella typhimurium |
| | Genotoxicity - estimate | Not genotoxic | Read across | |
| | Skin irritation | Irritant | ----- | Rabbit |
| | Eye irritation | Irritant | ----- | Rabbit |
| 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphtyl)ethan-1-one | Skin irritation | Non-irritant | ----- | Rabbit |
| | Skin sensitisation | 6825 ug/cm2 | OECD 429 | Mouse |
| | LD50 (oral) | > 5000 mg/kg bw | ----- | Rat |
| | LD50 (dermal) | > 5000 mg/kg bw | ----- | Rat |
| | Mutagenicity | Not mutagenic | OECD 471 | ----- |
| | NOAEL (development, oral) | 480 mg/kg bw/d | OECD 414 | Rat |
| Cedryl methyl ketone | NOAEL (fertility, oral) | 50 mg/kg bw/d | ----- | Rat |
| | NOAEL (development, oral) | 100 mg/kg bw/d | ----- | Rat |
| | LD50 (dermal) | > 2000 mg/kg bw | ----- | Rabbit |
| | LD50 (oral) | 5000 mg/kg bw | ----- | Rat |
| Cineole | LD50 (oral) | 2480 mg/kg bw | ----- | Rat |
| | NOAEL (oral) | 1200 mg/kg bw/d | | Rat |
| | Genotoxicity - in vitro | Not genotoxic | | |
| | Mutagenicity | Not mutagenic | | Salmonella typhimurium |
| | NOAEL (fertility, oral) | > 600 mg/kg bw/d | OECD 421 | Rat |
| | Skin irritation | Non-irritant | | |
| 4-Allylanisole | NOAEL (development, oral) | > 50 mg/kg bw/d | ----- | Rat |
| | Skin irritation | Moderately irritant | | Rabbit |
| | Mutagenicity | Not mutagenic | OECD 471 | Salmonella typhimurium |
| | NOAEL (oral) | 75 mg/kg bw/d | ----- | Rat |
| | NOAEL (fertility, oral) | > 37,5 mg/kg bw/d | ----- | Rat |
| | LD50 (oral) | 1230 mg/kg bw | ----- | Rat |
| | LD50 (dermal) | > 5000 mg/kg bw | | Rabbit |
| 2,4-Dimethylcyclohex-3-ene-1-carbaldehyde | Skin sensitisation | 5900 ug/cm2 | | |
| | LD50 (oral) | > 2000 mg/kg bw | | Rat |
| | LD50 (dermal) | > 2000 mg/kg bw | | Rabbit |

| | | | | |
|---|---|---|---|---|
| | Mutagenicity | Not mutagenic | | Salmonella typhimurium |

## SECTION 12 ECOLOGICAL INFORMATION

### 12.1. Toxicity

No ecotoxicological research has been carried out on this product.

Ecotoxicity : Toxic to aquatic organisms. Calculated LC50 (fish): 11 mg/l. Calculated EC50 (waterflea): 3 mg/l. Contains 0 % of components with unknown hazards to the aquatic environment.

### 12.2. Persistence and degradability

Persistence – degradability : May cause long-term adverse effects in the aquatic environment.

### 12.3. Bioaccumulative potential

Bioaccumulative potential : Contains bioaccumulating substances.

### 12.4. Mobility in soil

Mobility : Adsorbs to soil and has low mobility.

### 12.5. Results of PBT and vPvB assessment

PBT/vPvB assessment : Does not contain PBT or vPvB substances in concentrations higher than 0,1%.

### 12.6. Other adverse effects

Other information : Not applicable.

Ecological information:

| Chemical name | Property | | Method | Test animal |
|---|---|---|---|---|
| Hexyl salicylate | EC50 (waterflea) | 0,357 mg/l | OECD 202 | Daphnia magna |
| | IC50 (algea) | 0,28 mg/l | OECD 201 | Desmodesmus subspicatus |
| | LC50 (fish) - estimate | 1,34 mg/l | ----- | Brachydanio rerio |
| | Ultimate aerobic biodegradation (%) | 91 % | OECD 301 F | |
| Hexyl salicylate | Log P(ow) | 5,5000 | | |
| 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphtyl)ethan-1-one | EC50 (waterflea) | 1,38 mg/l | OECD 202 | ----- |
| | IC50 (algea) | > 2,6 mg/l | OECD 201 | ----- |
| | LC50 (fish) | 1,3 mg/l | OECD 203 | ----- |
| 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphtyl)ethan-1-one | Log P(ow) | 5,23 | | |
| 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphtyl)ethan-1-one | BCF | 600 | | |
| Cedryl methyl ketone | IC50 (algea) | 2,80 mg/l | OECD 201 | Algae |
| | EC50 (waterflea) | 0,86 mg/l | OECD 202 | Daphnia magna |
| | LC50 (fish) | 2,3 mg/l | OECD 203 | Pimephales promelas |
| | NOEC (waterflea) - chronic | 0,087 mg/l.d | OECD 211 | Daphnia magna |
| Cedryl methyl ketone | Log P(ow) | 5,6 | | |
| [3R-(3α,3aβ,7β,8aα)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one | LC50 (fish) - estimate | 0,055 mg/l | ----- | ----- |
| | EC50 (waterflea) - estimate | > 0,01 mg/l | | |

| | | | | |
|---|---|---|---|---|
| [3R-(3α,3aβ,7β,8aα)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one | Log P(ow) | 6,38 | | |

## SECTION 13 DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

Product residues : Do not dispose empty pack with waste produced by households. Containers may be recycled. Treat product residues, impregnated wipes and non-empty pack as hazardous waste.

Additional warning : None.

Waste water discharge : Do not dispose into the environment, in drains or in water courses.

European waste catalogue : Dispose hazardous waste in accordance with Directive 91/689/EEC under acknowledgement of a waste code according to Commission Decision 2000/532/EC to an official chemical waste depot.

Local legislation : Disposal should be in accordance with applicable regional, national, and local laws and regulations. Local regulations may be more stringent than regional or national requirements and must be complied with.

## SECTION 14 TRANSPORT INFORMATION

### 14.1. UN number

UN nr. : UN 3082

### 14.2. UN proper shipping name

Transport name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ( Hexyl salicylate ; 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphtyl)ethan-1-one )

Transport name (IMDG, IATA) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ( Hexyl salicylate ; 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphtyl)ethan-1-one )

### 14.3/14.4/14.5. Transport hazard class(es)/Packing group/Environmental hazards

ADR/RID/ADN (road/railway/inland waterways)

Class : 9

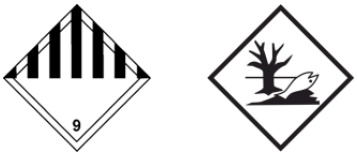
Classification code : M6

Packaging group : III

Danger label : 9 + the “environmentally hazardous substance” mark.

Tunnel restriction code : C/D

:




Other information : Not intended for carriage by tank-vessels on inland waterways. This product is not regulated as a dangerous good when transported in sizes of <= 5 L or <= 5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8 (Special provisions 375).

IMDG (sea)

Class : 9

Packaging group : III

EmS (fire / spill) : F - A / S - F

Marine pollutant : Yes

Other information : This product is not regulated as a dangerous good when transported in sizes of <= 5 L or <= 5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8 (IMDG code 37-14, 2.10.2.7).

IATA (air)

Class : 9

### 14.6. Special precautions for user

Other information : Country specific variations may apply. It is possible that a "Limited Quantity" exemption applies to the transport of this product.

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Marpol : Not intended to be carried in bulk according to International Maritime Organisation (IMO) instruments. Packaged liquids are not considered bulk.

## SECTION 15 REGULATORY INFORMATION

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

Community regulations : Regulation (EU) No 2015/830 (REACH), Regulation (EC) No 1272/2008 (CLP) and other regulations.

### 15.2. Chemical safety assessment

Chemical safety assessment : Not applicable.

## SECTION 16 OTHER INFORMATION *

### 16.1. Other information

The information in this safety data sheet is compiled in compliance with Regulation (EU) No 2015/830 dated 28 May 2015 and accurate to the best of our knowledge and experience at the date of issue specified. It is the user's obligation to use this product safely and to comply with all applicable laws and regulations concerning the use of the product. This safety data sheet complements the technical information sheets but does not replace them and offers no warranty with regard to product properties.

Users are also forewarned for any hazards involved when the product is used for other purposes than those for which it is designed.

Changed or new information with regard to the previous release is indicated with an asterisk (*).

List of abbreviations and acronyms that could be (but not necessarily are) used in this safety data sheet:

| | |
|---|---|
| ADR | : European Agreement concerning the International Carriage of Dangerous Goods by Road |
| ATE | : Acute Toxicity Estimate |
| CLP | : Classification, Labeling & Packaging |
| CMR | : Carcinogenic, Mutagenic or toxic for Reproduction |
| EEC | : European Economic Community |
| GHS | : Globally Harmonized System of Classification and Labelling of Chemicals |
| IATA | : International Air Transport Association |
| IBC code | : International Bulk Chemical Code |
| IMDG | : International Maritime Dangerous Goods Code |
| LD50/LC50 | : Lethal Dose/Concentration for 50% of a population |
| MAC | : Maximum Allowable Concentration |
| MARPOL | : International Convention for the Prevention of Pollution From Ships |
| NO(A)EL | : No Observed (Adverse) Effect Level |
| OECD | : Organisation for Economic Co-operation and Development |

| | | |
|---|---|---|
| PBT | : | Persistent, Bioaccumulative and Toxic |
| PC | : | Chemical product category |
| PT | : | Product type |
| REACH | : | Registration, Evaluation, Authorisation and Restriction of Chemicals |
| RID | : | Regulations concerning the International Carriage of Dangerous Goods by Rail |
| STP | : | Sewage Treatment Plant |
| SU | : | Sector of Use |
| TWA/STEL | : | Time-Weighted Average/Short Term Exposure Limit |
| UN | : | United Nations |
| VOC | : | Volatile Organic Compounds |
| vPvB | : | Very Persistent and Very Bioaccumulative |

Key data used to compile the Safety Data Sheet are from, but not limited to, one or more sources of information e.g. toxicological data from material suppliers, CONCAWE, IFRA, CESIO, Regulation EG 1272/2008, etc.

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008:

| | | |
|---|---|---|
| Skin Irrit. 2 | : | Calculation method. |
| Eye Irrit. 2 | : | Calculation method. |
| Skin Sens. 1/1A/1B | : | Calculation method. |
| Aquatic Chronic 2 | : | Calculation method. |

Full text of hazard classes mentioned in section 3:

| | | |
|---|---|---|
| Flam. Liq. 3 | : | Flammable liquid, category 3. |
| Acute Tox. 4 | : | Acute toxicity, category 4. |
| Skin Irrit. 2 | : | Skin irritation, category 2. |
| Eye Irrit. 2 | : | Eye irritation, category 2. |
| Skin Sens. 1/1A/1B | : | Skin sensitization, category 1/1A/1B. |
| Muta. 2 | : | Germ cell mutagenicity, Hazard Category 2. |
| Carc. 2 | : | Carcinogen, category 2. |
| Asp. Tox. 1 | : | Aspiration hazard, category 1. |
| Aquatic Chronic 1 | : | Hazardous to the aquatic environment — Chronic category 1. |
| Aquatic Chronic 2 | : | Hazardous to the aquatic environment — Chronic category 2. |
| Aquatic Acute 1 | : | Hazardous to the aquatic environment — Acute category 1. |

Full text of H-phrases mentioned in section 3:

| | |
|---|---|
| H226 | Flammable liquid and vapour. |
| H302 | Harmful if swallowed. |
| H304 | May be fatal if swallowed and enters airways. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation. |
| H341 | Suspected of causing genetic defects. |
| H351 | Suspected of causing cancer. |
| 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. |

Advice on any training appropriate for workers: none.

Number format : "," used as decimal separator.

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End of safety data sheet.

Print date : 2020-07-29