

Safety data sheet

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BASF safety data sheet. This is a translation of the country-specific safety data sheet into a language other than that required by law. This document does not replace the safety data sheet provided according to Regulation (EC) No 1907/2006.

Date / Revised: 17.12.2025

Version: 7.0

Date / Previous version: 11.11.2022

Previous version: 6.1

Product: **Rak® 3 + 4**

(ID no. 30059153/SDS_CPA_EU/EN)

Date of print 10.03.2026

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

1.1. Product identifier

Rak® 3 + 4

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

Relevant identified uses: crop protection product, insecticide

1.3. Details of the supplier of the safety data sheet

Company:
BASF SE
67056 Ludwigshafen
GERMANY
Operating Division Crop Protection

Telephone: +49 621 60-27777

E-mail address: Produktinformation-Pflanzenschutz@basf.com

1.4. Emergency telephone number

International emergency number:

Telephone: +49 180 2273-112

SECTION 2: Hazards Identification

2.1. Classification of the substance or mixture

For the classification of the mixture the following methods have been applied: extrapolation on the concentration levels of the hazardous substances, on basis of test results and after evaluation of experts. The methodologies used are mentioned at the respective test results.

According to Regulation (EC) No 1272/2008 [CLP]

|Skin Irrit. 2

H315 Causes skin irritation.

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| | |
|-------------------|---|
| Eye Irrit. 2 | H319 Causes serious eye irritation. |
| Skin Sens. 1 | H317 May cause an allergic skin reaction. |
| STOT SE 3 | H336 May cause drowsiness or dizziness. |
| Aquatic Chronic 2 | H411 Toxic to aquatic life with long lasting effects. |

For the classifications not written out in full in this section the full text can be found in section 16.

2.2. Label elements

According to Regulation (EC) No 1272/2008 [CLP]

Globally Harmonized System, EU (GHS)

Pictogram:



Signal Word:

Warning

Hazard Statement:

| | |
|--------|---|
| H319 | Causes serious eye irritation. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H336 | May cause drowsiness or dizziness. |
| H411 | Toxic to aquatic life with long lasting effects. |
| EUH401 | To avoid risks to human health and the environment, comply with the instructions for use. |

Precautionary Statement:

| | |
|------|---|
| P101 | If medical advice is needed, have product container or label at hand. |
| P102 | Keep out of reach of children. |
| P103 | Read carefully and follow all instructions. |

Precautionary Statements (Prevention):

| | |
|------|--|
| P280 | Wear protective gloves and eye protection or face protection. |
| P261 | Avoid breathing mist or vapour or spray. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P272 | Contaminated work clothing should not be allowed out of the workplace. |
| P264 | Wash contaminated body parts thoroughly after handling. |

Precautionary Statements (Response):

| | |
|--------------------|--|
| P312 | Call a POISON CENTER or physician 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. |
| P304 + P340 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. |
| P302 + P352 | IF ON SKIN: Wash with plenty of soap and water. |
| P333 + P313 | If skin irritation or rash occurs: Get medical attention. |
| P362 + P364 | Take off contaminated clothing and wash it before reuse. |
| P391 | Collect spillage. |
| P337 + P313 | If eye irritation persists: Get medical attention. |

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Precautionary Statements (Storage):

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

Precautionary Statements (Disposal):

P501 Dispose of contents and container to hazardous or special waste collection point.

Labeling of special preparations (GHS):

The classification applies to the liquid pheromone mixture inside the dispenser.

Hazard determining component(s) for labelling: (E,E)-8,10-Dodecadien-1-ol

2.3. Other hazardsAccording to Regulation (EC) No 1272/2008 [CLP]

Product does not contain a substance above legal limits included in the list established in accordance with Article 59(1) of Regulation (EC) No 1907/2006 for having endocrine disrupting properties or is identified to have endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605. The product does not fulfill the criteria for PBT (Persistent/bioaccumulative/toxic) and vPvB (very persistent/very bioaccumulative).

SECTION 3: Composition/Information on Ingredients**3.1. Substances**

Not applicable

3.2. MixturesChemical nature

crop protection agent in dispenser/ampoula, pheromone, Vapor releasing product (VP)

Chamber 1 contains:stabilized pheromone mixture, (E,E)-8,10-Dodecadien-1-ol, n-Tetradecyl acetate ca. 225 mg

Chamber 2 contains:stabilized pheromone mixture, (Z)-11-Tetradecen-1-yl acetate, n-Tetradecyl acetate ca. 225 mg

Regulatory relevant ingredients

(E,E)-8,10-Dodecadien-1-ol

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| | |
|---|--|
| <p> Content (W/W): \geq 3.78 % CAS Number: 33956-49-9 EC-Number: 251-761-2</p> | <p>Skin Irrit. 2 Eye Irrit. 2 Skin Sens. 1B STOT SE 3 (drowsiness and dizziness) Aquatic Chronic 2 H319, H315, H317, H336, H411</p> |
| <p> (Z)-11-Tetradecen-1-yl acetate Content (W/W): \geq 3.68 % CAS Number: 20711-10-8 EC-Number: 243-982-8</p> | <p>Aquatic Chronic 2 H411</p> |
| <p> n-Tetradecyl acetate Content (W/W): \geq 1.84 % CAS Number: 638-59-5</p> | <p>Aquatic Chronic 2 H411</p> |
| <p> 2,6-di-tert-Butyl-p-cresol Content (W/W): $<$ 0.25 % CAS Number: 128-37-0 EC-Number: 204-881-4 REACH registration number: 01-2119555270-46, 01-2119565113-46</p> | <p>Aquatic Acute 1 Aquatic Chronic 1 M-factor chronic: 1 H400, H410</p> |

For the classifications not written out in full in this section, including the hazard classes and the hazard statements, the full text is listed in section 16.

SECTION 4: First-Aid Measures

4.1. Description of first aid measures

First aid personnel should pay attention to their own safety. If the patient is likely to become unconscious, place and transport in stable sideways position (recovery position). Immediately remove contaminated clothing.

If inhaled:

Keep patient calm, remove to fresh air, seek medical attention.

On skin contact:

Wash thoroughly with soap and water

On contact with eyes:

Wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

On ingestion:

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Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention.

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

Symptoms: Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11., (Further) symptoms and / or effects are not known so far

Hazards: Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11. (Further) symptoms and / or effects are not known so far

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

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

SECTION 5: Fire-Fighting Measures

5.1. Extinguishing media

Suitable extinguishing media:
water spray, carbon dioxide, dry powder, foam

5.2. Special hazards arising from the substance or mixture

Endangering substances: Carbon monoxide, Carbon dioxide, nitrogen oxides
Advice: The substances/groups of substances mentioned can be released in case of fire.

5.3. Advice for fire-fighters

Special protective equipment:
Wear self-contained breathing apparatus and chemical-protective clothing.

Further information:

Keep containers cool by spraying with water if exposed to fire. In case of fire and/or explosion do not breathe fumes. Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

SECTION 6: Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective clothing. Avoid contact with the skin, eyes and clothing.

6.2. Environmental precautions

Do not discharge into the subsoil/soil. Do not discharge into drains/surface waters/groundwater.

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6.3. Methods and material for containment and cleaning up

For small amounts: Sweep/shovel up.

For large amounts: Sweep/shovel up.

Dispenser/ampoules should be collected. Contain and collect mechanically and dispose of in accordance with local regulations. Collect waste in suitable containers, which can be labeled and sealed. Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations. Wear suitable protective equipment.

6.4. Reference to other sections

Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

SECTION 7: Handling and Storage

7.1. Precautions for safe handling

No special measures necessary if stored and handled correctly. Ensure thorough ventilation of stores and work areas. When using do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift.

Protection against fire and explosion:

Keep away from sources of ignition - No smoking. The product is combustible.

7.2. Conditions for safe storage, including any incompatibilities

Segregate from foods and animal feeds. Odour-releasing: Segregate from products sensitive to odours.

Further information on storage conditions: Keep in a cool place. Protect from direct sunlight.

Storage stability:

Avoid prolonged storage.

Protect from temperatures above: 5 °C

Diffusion if stored for extended periods above the indicated temperature.

7.3. Specific end use(s)

For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

SECTION 8: Exposure Controls/Personal Protection

8.1. Control parameters

Components with occupational exposure limits

No substance specific occupational exposure limits known.

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8.2. Exposure controls

Personal protective equipment

Respiratory protection:

Respiratory protection not required.

Hand protection:

Suitable chemical resistant safety gloves (EN ISO 374-1) also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN ISO 374-1): E.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (0.7 mm) etc.

Eye protection:

Safety glasses with side-shields (frame goggles) (e.g. EN 166)

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

General safety and hygiene measures

The statements on personal protective equipment in the instructions for use apply when handling crop-protection agents in final-consumer packing. Wearing of closed work clothing is recommended. Store work clothing separately. Keep away from food, drink and animal feeding stuffs.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

| | |
|------------------------|--|
| State of matter: | liquid |
| Form: | liquid |
| Colour: | brown |
| Odour: | strong specific odour |
| Odour threshold: | Not determined due to potential health hazard by inhalation. |
| Melting point: | approx. 0 °C The data given are those of the active ingredient. |
| Boiling point: | approx. 117 °C The data given are those of the active ingredient. |
| Flammability: | hardly combustible |
| Lower explosion limit: | As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use. |

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Upper explosion limit:

As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.

Flash point:

approx. 138 °C
data refers to the ingredients of compartment 1

Auto-ignition temperature:

approx. 235 °C
data refers to the ingredients of compartment 2

Thermal decomposition: No decomposition if stored and handled as prescribed/indicated.

pH value:

approx. 5 - 7
(approx. 20 °C)
(saturated solution)

Viscosity, kinematic:

approx. 6.94 mm²/s
(20 °C)

(calculated (from dynamic viscosity))

Viscosity, dynamic:

approx. 6.11 mPa.s
(20 °C)

Thixotropy:

not thixotropic

Solubility in water:

of low solubility, Information based on the main component/s.

Partitioning coefficient n-octanol/water (log Kow):

not applicable for mixtures

Vapour pressure:

approx. 0.00016 hPa
(20 °C)

Information based on the main component/s.

Density:

approx. 0.88 g/cm³
(20 °C)

data refers to the ingredients of compartment 2

Relative vapour density (air):

not determined

Particle characteristics

Particle size distribution: The substance / product is marketed or used in a non solid or granular form. -

9.2. Other information**Information with regard to physical hazard classes**Explosives

Explosion hazard: not explosive

Oxidizing properties

Fire promoting properties: Based on its structural properties the product is not classified as oxidizing.

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Other safety characteristics

Other Information: The product consists of a pheromone mixture filled into a dispenser. Stated information applies for the dispenser content if not differently indicated.

SECTION 10: Stability and Reactivity

10.1. Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

10.2. Chemical stability

The product is stable if stored and handled as prescribed/indicated.

10.3. Possibility of hazardous reactions

No hazardous reactions if stored and handled as prescribed/indicated.

10.4. Conditions to avoid

See SDS section 7 - Handling and storage.

10.5. Incompatible materials

Substances to avoid:
strong bases, strong acids, strong oxidizing agents

10.6. Hazardous decomposition products

Hazardous decomposition products:
No hazardous decomposition products if stored and handled as prescribed/indicated.

SECTION 11: Toxicological Information

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

Acute toxicity

Assessment of acute toxicity:

The product has not been tested. The statement has been derived from the properties of the individual components. Virtually nontoxic after a single skin contact. Virtually nontoxic by inhalation. Virtually nontoxic after a single ingestion.

Information on: (E,E)-8,10-Dodecadien-1-ol

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Experimental/calculated data:

LD50 rat (oral): > 5,000 mg/kg

| *Information on: (Z)-11-Tetradecen-1-yl acetate*

Experimental/calculated data:

LD50 rat (oral): > 5,000 mg/kg

| *Information on: n-Tetradecyl acetate*

Experimental/calculated data:

LD50 rat (oral): > 5,000 mg/kg

Information on: (E,E)-8,10-Dodecadien-1-ol

Experimental/calculated data:

LC50 rat (by inhalation): > 5.26 mg/l 4 h

Tested as dust aerosol.

| *Information on: (Z)-11-Tetradecen-1-yl acetate*

Experimental/calculated data:

LC50 rat (by inhalation): > 5.3 mg/l 4 h

| *An aerosol was tested.*

| *Information on: n-Tetradecyl acetate*

Experimental/calculated data:

LC50 rat (by inhalation): 4.74 mg/l 4 h

| *No mortality was observed. An aerosol was tested.*

Information on: (E,E)-8,10-Dodecadien-1-ol

Experimental/calculated data:

LD50 rat (dermal): > 2,000 mg/kg

| *Information on: (Z)-11-Tetradecen-1-yl acetate*

Experimental/calculated data:

LD50 rat (dermal): > 5,000 mg/kg

| *Information on: n-Tetradecyl acetate*

Experimental/calculated data:

LD50 rat (dermal): > 2,000 mg/kg

Irritation

Assessment of irritating effects:

| The product has not been tested. The statement has been derived from the properties of the individual components. Skin contact causes irritation. Eye contact causes irritation.

Information on: (E,E)-8,10-Dodecadien-1-ol

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*Experimental/calculated data:**Skin corrosion/irritation*| *rabbit: Irritant.*| *Information on: (Z)-11-Tetradecen-1-yl acetate**Experimental/calculated data:**Skin corrosion/irritation*| *rabbit: non-irritant*| *Information on: n-Tetradecyl acetate**Experimental/calculated data:**Skin corrosion/irritation*| *rabbit: non-irritant**Information on: (E,E)-8,10-Dodecadien-1-ol**Experimental/calculated data:**Serious eye damage/irritation*| *rabbit: Irritant.*| *Information on: (Z)-11-Tetradecen-1-yl acetate**Experimental/calculated data:**Serious eye damage/irritation*| *rabbit: non-irritant*| *Information on: n-Tetradecyl acetate**Experimental/calculated data:**Serious eye damage/irritation*| *rabbit: non-irritant*Respiratory/Skin sensitization

Assessment of sensitization:

The product has not been tested. The statement has been derived from the properties of the individual components. Sensitization after skin contact possible.

*Information on: (E,E)-8,10-Dodecadien-1-ol**Experimental/calculated data:*| *skin sensitizing*| *Information on: (Z)-11-Tetradecen-1-yl acetate**Experimental/calculated data:*| *Guinea pig maximization test guinea pig: Non-sensitizing.*| *Information on: n-Tetradecyl acetate**Experimental/calculated data:*| *Guinea pig maximization test guinea pig: Non-sensitizing.*

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Germ cell mutagenicity

Assessment of mutagenicity:

The product has not been tested. The statement has been derived from the properties of the individual components. Mutagenicity tests revealed no genotoxic potential.

Carcinogenicity

Assessment of carcinogenicity:

The product has not been tested. The statement has been derived from the properties of the individual components. The results of various animal studies gave no indication of a carcinogenic effect.

Reproductive toxicity

Assessment of reproduction toxicity:

The product has not been tested. The statement has been derived from the properties of the individual components. The results of animal studies gave no indication of a fertility impairing effect.

Developmental toxicity

Assessment of teratogenicity:

The product has not been tested. The statement has been derived from the properties of the individual components. Animal studies gave no indication of a developmental toxic effect at doses that were not toxic to the parental animals.

Specific target organ toxicity (single exposure)

Assessment of STOT single:

Possible narcotic effects (drowsiness or dizziness).

Remarks: The product has not been tested. The statement has been derived from the properties of the individual components.

Repeated dose toxicity and Specific target organ toxicity (repeated exposure)

Assessment of repeated dose toxicity:

The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: 2,6-di-tert-Butyl-p-cresol

Assessment of repeated dose toxicity:

The substance may cause damage to the liver after repeated ingestion of high doses, as shown in animal studies.

Aspiration hazard

not applicable

Interactive effects

No data available.

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11.2. Information on other hazards

Endocrine disrupting properties

Product does not contain a substance above legal limits included in the list established in accordance with Article 59(1) of Regulation (EC) No 1907/2006 for having endocrine disrupting properties or is identified to have endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

Other information

Other relevant toxicity information

Misuse can be harmful to health.

SECTION 12: Ecological Information

12.1. Toxicity

Assessment of aquatic toxicity:

| Toxic to aquatic life with long lasting effects.

The product has not been tested. The statement has been derived from the properties of the individual components.

Information on:(E,E)-8,10-Dodecadien-1-ol

Toxicity to fish:

| *LC50 (96 h) > 0.685 - < 1.22 mg/l, Danio rerio*

| *Endpoint is not reliable to conclude a classification.*

| *Information on:(Z)-11-Tetradecen-1-yl acetate*

Toxicity to fish:

| *LC50 (96 h) 5.518 mg/l, Oncorhynchus mykiss*

| *Endpoint is not reliable to conclude a classification.*

| *Information on:n-Tetradecyl acetate*

Toxicity to fish:

| *LC50 (96 h) 5.518 mg/l, Oncorhynchus mykiss*

| *Endpoint is not reliable to conclude a classification.*

Information on:(E,E)-8,10-Dodecadien-1-ol

Aquatic invertebrates:

| *EC50 (48 h) 0.3 mg/l, Daphnia magna*

| *Endpoint is not reliable to conclude a classification.*

| *Information on:2,6-di-tert-Butyl-p-cresol*

Aquatic invertebrates:

| *EC0 (48 h) 0.48 mg/l, Daphnia magna (OECD Guideline 202, part 1, static)*

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| *The statement of the toxic effect relates to the analytically determined concentration.*

Information on:(E,E)-8,10-Dodecadien-1-ol

Aquatic plants:

| *EC50 0.221 mg/l (growth rate), Scenedesmus subspicatus (static)*

| *Endpoint is not reliable to conclude a classification.*

| *EC10 0.049 mg/l (growth rate), Scenedesmus subspicatus (static)*

| *Endpoint is not reliable to conclude a classification.*

| *Information on:2,6-di-tert-Butyl-p-cresol*

Aquatic plants:

| *EC50 (72 h) > 0.40 mg/l (growth rate), Scenedesmus subspicatus (Guideline 92/69/EEC, C.3, static)*

| *The statement of the toxic effect relates to the analytically determined concentration.*

| *Information on:2,6-di-tert-Butyl-p-cresol*

Chronic toxicity to aquatic invertebrates:

| *No observed effect concentration (21 d) 0.316 mg/l, Daphnia magna (OECD Guideline 202, part 2, semistatic)*

| *The details of the toxic effect relate to the nominal concentration.*

12.2. Persistence and degradability

Assessment biodegradation and elimination (H₂O):

| Can be eliminated mechanically.

Information on:(E,E)-8,10-Dodecadien-1-ol

Assessment biodegradation and elimination (H₂O):

| *Readily biodegradable (according to OECD criteria).*

| *Information on:(Z)-11-Tetradecen-1-yl acetate*

Assessment biodegradation and elimination (H₂O):

| *Readily biodegradable (according to OECD criteria).*

| *Information on:n-Tetradecyl acetate*

Assessment biodegradation and elimination (H₂O):

Readily biodegradable (according to OECD criteria).

12.3. Bioaccumulative potential

Assessment bioaccumulation potential:

| The product has not been tested. The statement has been derived from the properties of the individual components.

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Product: **Rak® 3 + 4**

(ID no. 30059153/SDS_CPA_EU/EN)

Date of print 10.03.2026

Information on:(E,E)-8,10-Dodecadien-1-ol

Assessment bioaccumulation potential:

| *Significant accumulation in organisms is not to be expected.*

| *Information on:(Z)-11-Tetradecen-1-yl acetate*

Assessment bioaccumulation potential:

| *Significant accumulation in organisms is not to be expected.*

| *Information on:n-Tetradecyl acetate*

Assessment bioaccumulation potential:

| *Significant accumulation in organisms is not to be expected.*

12.4. Mobility in soil

Assessment transport between environmental compartments:

Adsorption in soil: The product has not been tested. The statement has been derived from the properties of the individual components.

| *Information on:2,6-di-tert-Butyl-p-cresol*

Assessment transport between environmental compartments:

| *Volatility: The substance will not evaporate into the atmosphere from the water surface.*

| *Adsorption in soil: Adsorption to solid soil phase is expected.*

12.5. Results of PBT and vPvB assessment

The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria.

12.6. Endocrine disrupting properties

Product does not contain a substance above legal limits included in the list established in accordance with Article 59(1) of Regulation (EC) No 1907/2006 for having endocrine disrupting properties or is identified to have endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

12.7. Other adverse effects

The product does not contain substances that are listed in Regulation (EU) 2024/590 on substances that deplete the ozone layer.

Results of PMT and vPvM assessment

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The product does not contain a substance fulfilling the PMT criteria. The product does not contain a substance fulfilling the vPvM criteria.

Additional information

Other ecotoxicological advice:

Do not discharge product into the environment without control.

SECTION 13: Disposal Considerations

13.1. Waste treatment methods

Must be sent to a suitable incineration plant, observing local regulations.

Contaminated packaging:

Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the substance/product.

SECTION 14: Transport Information

Land transport

ADR

UN number or ID number: UN3082
 UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ((8E,10E)-DODECA-8,10-DIENOL, (Z)-TETRADEC-11-ENYL ACETATE)

Transport hazard class(es): 9, EHSM

Packing group: III

Environmental hazards: yes

Special precautions for user: None known

RID

UN number or ID number: UN3082
 UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ((8E,10E)-DODECA-8,10-DIENOL, (Z)-TETRADEC-11-ENYL ACETATE)

Transport hazard class(es): 9, EHSM

Packing group: III

Environmental hazards: yes

Special precautions for user: None known

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Inland waterway transport

ADN

| UN number or ID number: UN3082
UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ((8E,10E)-DODECA-8,10-DIENOL, (Z)-TETRADEC-11-ENYL ACETATE)

Transport hazard class(es): 9, EHS
| Packing group: III
Environmental hazards: yes
| Special precautions for user: None known

Transport in inland waterway vessel

Not evaluated

Sea transport

IMDG

| UN number or ID number: UN 3082
UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ((8E,10E)-DODECA-8,10-DIENOL, (Z)-TETRADEC-11-ENYL ACETATE)

Transport hazard class(es): 9, EHS
| Packing group: III
Environmental hazards: yes
Marine pollutant: YES
| Special precautions for user: EmS: F-A; S-F

Air transport

IATA/ICAO

| UN number or ID number: UN 3082
UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ((8E,10E)-DODECA-8,10-DIENOL, (Z)-TETRADEC-11-ENYL ACETATE)

Transport hazard class(es): 9, EHS
| Packing group: III
Environmental hazards: yes
| Special precautions for user: None known

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| user:

14.1. UN number or ID number

See corresponding entries for "UN number or ID number" for the respective regulations in the tables above.

14.2. UN proper shipping name

See corresponding entries for "UN proper shipping name" for the respective regulations in the tables above.

14.3. Transport hazard class(es)

See corresponding entries for "Transport hazard class(es)" for the respective regulations in the tables above.

14.4. Packing group

See corresponding entries for "Packing group" for the respective regulations in the tables above.

14.5. Environmental hazards

See corresponding entries for "Environmental hazards" for the respective regulations in the tables above.

14.6. Special precautions for user

See corresponding entries for "Special precautions for user" for the respective regulations in the tables above.

14.7. Maritime transport in bulk according to IMO instruments

Maritime transport in bulk is not intended.

Further information

Product may be shipped as non-hazardous in suitable packages containing a net quantity of 5 L or less under the provisions of various regulatory agencies: ADR, RID, ADN: Special Provision 375; IMDG: 2.10.2.7; IATA: A197; TDG: Special Provision 99(2); 49CFR: §171.4 (c) (2) and also the Special Provision 375 in Appendix B which is regulated in China "Regulations Concerning Road Transportation of Dangerous Goods Part 3: Index of dangerous goods name and transportation requirements" (JT/T 617.3)

SECTION 15: Regulatory Information

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

Prohibitions, Restrictions and Authorizations

Annex XVII of Regulation (EC) No 1907/2006: Number on List: 3

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Restrictions of Regulation (EC) No 1907/2006, Annex XVII, do not apply for the intended use(s) of the product given in this SDS.

Directive 2012/18/EU - Control of Major Accident Hazards involving dangerous substances (EU):

List entry in regulation: E2

Classification applies for standard conditions of temperature and pressure.

To avoid risks to man and the environment, comply with the instructions for use.

15.2. Chemical Safety Assessment

Advice on product handling can be found in sections 7 and 8 of this safety data sheet.

SECTION 16: Other Information

For proper and safe use of this product, please refer to the approval conditions laid down on the product label.

Full text of the classifications, including the hazard classes and the hazard statements, if mentioned in section 2 or 3:

| | |
|-----------------|---|
| Skin Irrit. | Skin irritation |
| Eye Irrit. | Eye irritation |
| Skin Sens. | Skin sensitization |
| STOT SE | Specific target organ toxicity — single exposure |
| Aquatic Chronic | Hazardous to the aquatic environment - chronic |
| Aquatic Acute | Hazardous to the aquatic environment - acute |
| H319 | Causes serious eye irritation. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H336 | May cause drowsiness or dizziness. |
| H411 | Toxic to aquatic life with long lasting effects. |
| EUH401 | To avoid risks to human health and the environment, comply with the instructions for use. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |

Abbreviations

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road.
 ADN = The European Agreement concerning the International Carriage of Dangerous Goods by Inland waterways. ATE = Acute Toxicity Estimates. CAO = Cargo Aircraft Only. CAS = Chemical Abstract Service. CLP = Classification, Labelling and Packaging of substances and mixtures. DIN = German national organization for standardization. DNEL = Derived No Effect Level. EC50 = Effective concentration median for 50% of the population. EC = European Community. EN = European Standards. IARC = International Agency for Research on Cancer. IATA = International Air Transport Association. IBC-Code = Intermediate Bulk Container code. IMDG = International Maritime Dangerous Goods Code. ISO = International Organization for Standardization. STEL = Short-Term Exposure Limit. LC50 = Lethal concentration median for 50% of the population. LD50 = Lethal dose median for 50% of the population. TLV = Threshold Limit Value. MARPOL = The International Convention for the Prevention of Pollution

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from Ships. NEN = Dutch Norm. NOEC = No Observed Effect Concentration. OEL = Occupational Exposure Limit. OECD = Organization for Economic Cooperation and Development. PBT = Persistent, Bioaccumulative and Toxic. PMT = Persistent, Mobile and Toxic. PNEC = Predicted No Effect Level. PPM = Parts per million. RID = The European Agreement concerning the International Carriage of Dangerous Goods by Rail. TWA = Time Weight Average. UN-number = UN number at transport. vPvB = very Persistent and very Bioaccumulative. vPvM = very Persistent and very Mobile.

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. This safety data sheet is neither a Certificate of Analysis (CoA) nor technical data sheet and shall not be mistaken for a specification agreement. Identified uses in this safety data sheet do neither represent an agreement on the corresponding contractual quality of the substance/mixture nor a contractually designated use. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.

Vertical lines in the left hand margin indicate an amendment from the previous version.