# DIMETHOATE 400 G/L EC

| Version | Revision Date: | SDS Number: | Date of last issue: - |
|---|---|---|---|
| 1.0 | 04.11.2024 | 50000342 | Date of first issue: 04.11.2024 |

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

### 1.1 Product identifier

**Product name** DIMETHOATE 400 G/L EC

**Other means of identification**

**Product code** 50000342

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

**Use of the Substance/Mixture** : Insecticide

**Recommended restrictions on use** : Use as recommended by the label.
For professional users only.

### 1.3 Manufacturer or supplier's details

**Supplier Address**

FMC Agricultural Solutions A/S
Thyborønvej 78
DK-7673 Harboøre
Denmark

Telephone: +45 9690 9690
Telefax: +45 9690 9691
E-mail address: SDS-Info@fmc.com .

### 1.4 Emergency telephone number

For leak, fire, spill or accident emergencies, call:
Denmark: +45-69918573 (CHEMTREC)

Medical emergency:
Denmark: +45 82 12 12 12

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**Classification (REGULATION (EC) No 1272/2008)**

| | |
|---|---|
| Flammable liquids, Category 3 | H226: Flammable liquid and vapour. |
| Acute toxicity, Category 4 | H302: Harmful if swallowed. |

| | |
|---|---|
| Acute toxicity, Category 4 | H332: Harmful if inhaled. |
| Skin sensitisation, Sub-category 1B | H317: May cause an allergic skin reaction. |
| Aspiration hazard, Category 1 | H304: May be fatal if swallowed and enters airways. |
| Long-term (chronic) aquatic hazard, Category 1 | H410: Very toxic to aquatic life with long lasting effects. |

### 2.2 Label elements

**Labelling (REGULATION (EC) No 1272/2008)**

Hazard pictograms :

Signal word : Danger

Hazard statements :
H226 Flammable liquid and vapour.
H302 + H332 Harmful if swallowed or if inhaled.
H304 May be fatal if swallowed and enters airways.
H317 May cause an allergic skin reaction.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements :

**Prevention:**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

**Response:**

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
P331 Do NOT induce vomiting.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P310 Immediately call a POISON CENTER or doctor/ physician.

**Disposal:**

P501 Dispose of contents/container as hazardous waste in accordance with local regulations.

**Hazardous components which must be listed on the label:**

dimethoate (ISO)
cyclohexanone
xylene

**Additional Labelling**

EUH401 To avoid risks to human health and the environment, comply with the instructions for use.

For special phrases (SP) and safety intervals, consult the label.

### 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: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

**Components**

| Chemical name | CAS-No.<br>EC-No.<br>Index-No.<br>Registration number | Classification | Concentration (% w/w) |
|---|---|---|---|
| dimethoate (ISO) | 60-51-5<br>200-480-3<br>015-051-00-4 | Self-react. E; H242<br>Acute Tox. 4; H302<br>Acute Tox. 4; H332<br>Acute Tox. 4; H312<br>Aquatic Chronic 1; H410<br>M-Factor (Acute aquatic toxicity): 1<br>Acute toxicity estimate<br>Acute inhalation toxicity (dust/mist): 1,6 mg/l | >= 30 - < 50 |
| cyclohexanone | 108-94-1<br>203-631-1<br>606-010-00-7 | Flam. Liq. 3; H226<br>Acute Tox. 4; H332 | >= 20 - < 30 |
| xylene | 1330-20-7<br>215-535-7 | Flam. Liq. 3; H226<br>Acute Tox. 4; H332 | >= 20 - < 25 |

| | | | |
|---|---|---|---|
| | 601-022-00-9 | Acute Tox. 4; H312<br>Skin Irrit. 2; H315<br>Aquatic Chronic 3; H412 | |

For explanation of abbreviations see section 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

General advice : Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.
Symptoms of poisoning may appear several hours later.
Do not leave the victim unattended.

Protection of first-aiders : Avoid inhalation, ingestion and contact with skin and eyes.

If inhaled : Remove to fresh air.
If unconscious, place in recovery position and seek medical advice.
If experiencing any discomfort, immediately remove from exposure. Light cases: Keep person under surveillance. Get medical attention immediately if symptoms develop. Serious cases: Get medical attention immediately or call for an ambulance.

In case of skin contact : If on clothes, remove clothes.
If on skin, rinse well with water.
Wash off with soap and plenty of water.
Get medical attention immediately if irritation develops and persists.

In case of eye contact : Immediately flush eye(s) with plenty of water.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.

If swallowed : Keep respiratory tract clear.
Do NOT induce vomiting.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
Take victim immediately to hospital.

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

Symptoms : On contact, the first symptoms to appear may be irritation.
Symptoms of cholinesterase inhibition: nausea, headache, vomiting, cramps, weakness, blurred vision, pin-point pupils, tightness in chest, laboured breathing, nervousness, sweating, watering of eyes, drooling or frothing of mouth and nose, muscle spasms and coma.

Risks : Harmful if swallowed or if inhaled.
May be fatal if swallowed and enters airways.
May cause an allergic skin reaction.

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

Treatment : Relapse can occur after initial improvement. VERY CLOSE SUPERVISION OF THE PATIENT IS INDICATED FOR AT LEAST 48 HOURS, DEPENDING ON THE SEVERITY OF POISONING.
Much information on (acetyl)cholinesterase inhibition and its treatment can be found on the internet.
Decontamination procedures such as whole body washing, gastric lavage and administration of activated charcoal are often required.
ANTIDOTE: If symptoms of cholinesterase inhibition (see subsection 4.2.) are present, administer atropine sulphate, which often is a lifesaving antidote, in large doses, TWO to FOUR mg intravenously or intramuscularly as soon as possible. Repeat at 5 to 10 minute intervals until signs of atropinisation appear and maintain full atropinisation until the chemical product is fully metabolised.

Obidoxime chloride (Toxogonin), alternatively pralidoxime chloride(2-PAM), may be administered as an adjunct to, but not a substitute for atropine sulphate. Treatment with oxime should be maintained as long as atropine sulphate is administered.
Especially in the case of dimethoate, treatment with atropine sulphate is essential. Results of treatment with oxime for dimethoate poisoning are notoriously varying and it may happen that oxime doesn't have any positive effect. In no case should oxime be used instead of atropine sulphate.
At first sign of pulmonary oedema the patient should be given supplementary oxygen and treated symptomatically.
If any of the signs of cholinesterase inhibition occurs, call a doctor (physician), clinic or hospital immediately. Explain that the victim has been exposed to an organophosphorus insecticide.
Describe his/her condition and the extent of exposure. Immediately remove the exposed person from the area where the product is present.

In an industrial setting, the antidote atropine sulphate should be available at the workplace.
This product is a cholinesterase inhibitor affecting the central and peripheral nervous systems producing respiratory depression.
The product contains petroleum distillates which may pose an aspiration pneumonia hazard.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

Suitable extinguishing media : Dry chemical, CO2, water spray or regular foam.
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media : Do not spread spilled material with high-pressure water streams.
High volume water jet

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

Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.

Hazardous combustion products : Fire may produce irritating, corrosive and/or toxic gases.
Oxides of phosphorus
Nitrogen oxides (NOx)
Carbon oxides
Sulphur oxides
hydrogen sulphide
dimethyl sulphide
methyl mercaptan

The product (dimethoate) may decompose rapidly when heated, which can result in explosion.

### 5.3 Advice for firefighters

Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
For safety reasons in case of fire, cans should be stored separately in closed containments.
Use a water spray to cool fully closed containers.

## SECTION 6: Accidental release measures

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

Personal precautions : Use personal protective equipment.
Ensure adequate ventilation.
Remove all sources of ignition.
Immediately evacuate personnel to safe areas.
Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
Never return spills in original containers for re-use.

Mark the contaminated area with signs and prevent access to unauthorized personnel.
Only qualified personnel equipped with suitable protective equipment may intervene.

### 6.2 Environmental precautions

Environmental precautions : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.

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

Methods for 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).

### 6.4 Reference to other sections

See sections: 7, 8, 11, 12 and 13.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Advice on safe handling : Avoid formation of aerosol.
Do not breathe vapours/dust.
Avoid exposure - obtain special instructions before use.
Avoid contact with skin and eyes.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Take precautionary measures against static discharges.
Provide sufficient air exchange and/or exhaust in work rooms.
Open drum carefully as content may be under pressure.
Dispose of rinse water in accordance with local and national regulations.

The product is flammable. Formation of explosive vapour-air mixtures is possible. Fire prevention measures should be taken.
In an industrial environment, it is recommended to avoid all personal contact with the product, if possible, by using closed systems with remote system control. The material should be handled by mechanical means as much as possible. Adequate ventilation or local exhaust ventilation is required. The exhaust gases should be filtered or treated otherwise. For personal protection in this situation, see section 8.

Advice on protection against : Do not spray on a naked flame or any incandescent material.

| | | |
|---|---|---|
| fire and explosion | | Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). Keep away from open flames, hot surfaces and sources of ignition.<br><br>If the temperature of the liquid is below 25°C, which is 10°C below its flash point of 35°C, the fire and explosion hazard is considered minor. At higher temperatures, the hazard gradually becomes more serious. |
| Hygiene measures | : | When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.<br><br>Remove and wash contaminated clothing and gloves, including the inside, before re-use. |

**7.2 Conditions for safe storage, including any incompatibilities**

| | | |
|---|---|---|
| Requirements for storage areas and containers | : | No smoking. 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. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards. |
| Further information on storage conditions | : | The product is stable when stored at temperatures not exceeding 25°C. At low temperatures formation of crystals may occur. To avoid crystallisation, storage at temperatures above 10°C is required. The product should never be heated above 35°C and also local heating above this temperature should be avoided. See subsection 10.2.<br><br>Store in closed, labelled containers. The storage room should be constructed of incombustible material, closed, dry, ventilated and with impermeable floor, without access of unauthorised persons or children. A warning sign reading “POISON” is recommended. The room should only be used for storage of chemicals. Food, drink, feed and seed should not be present. A hand wash station should be available. |
| Further information on storage stability | : | No decomposition if stored and applied as directed. |

**7.3 Specific end use(s)**

| | | |
|---|---|---|
| Specific use(s) | : | Registered pesticide to be used in accordance with a label approved by country-specific regulatory authorities. |

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

**Occupational Exposure Limits**

| Components | CAS-No. | Value type (Form of exposure) | Control parameters | Basis |
|---|---|---|---|---|
| cyclohexanone | 108-94-1 | STEL | 20 ppm<br>81,6 mg/m3 | 2000/39/EC |
| | Further information: Identifies the possibility of significant uptake through the skin, Indicative | | | |
| | | TWA | 10 ppm<br>40,8 mg/m3 | 2000/39/EC |
| | Further information: Identifies the possibility of significant uptake through the skin, Indicative | | | |
| | | S | 20 ppm<br>81,6 mg/m3 | DK OEL |
| | Further information: Means that the substance can be absorbed through the skin., Guiding list of organic solvents. | | | |
| | | GV | 10 ppm<br>41 mg/m3 | DK OEL |
| | Further information: Means that the substance can be absorbed through the skin., Guiding list of organic solvents. | | | |
| xylene | 1330-20-7 | TWA | 50 ppm<br>221 mg/m3 | 2000/39/EC |
| | Further information: Identifies the possibility of significant uptake through the skin, Indicative | | | |
| | | STEL | 100 ppm<br>442 mg/m3 | 2000/39/EC |
| | Further information: Identifies the possibility of significant uptake through the skin, Indicative | | | |
| | | S | 100 ppm<br>442 mg/m3 | DK OEL |
| | Further information: Means that the substance can be absorbed through the skin., Guiding list of organic solvents. | | | |
| | | GV | 25 ppm<br>109 mg/m3 | DK OEL |
| | Further information: Means that the substance can be absorbed through the skin., Guiding list of organic solvents. | | | |

**Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:**

| Substance name | End Use | Exposure routes | Potential health effects | Value |
|---|---|---|---|---|
| cyclohexanone | Workers | Inhalation | Long-term systemic effects | 40 mg/m3 |
| | Workers | Inhalation | Acute systemic effects | 80 mg/m3 |
| | Workers | Inhalation | Long-term local effects | 40 mg/m3 |
| | Workers | Inhalation | Acute local effects | 80 mg/m3 |
| | Workers | Dermal | Long-term systemic | 4 mg/kg |

| | | | | |
|---|---|---|---|---|
| | | | effects | |
| | Workers | Dermal | Acute systemic effects | 4 mg/kg |
| | Consumers | Inhalation | Long-term systemic effects | 10 mg/m3 |
| | Consumers | Inhalation | Acute systemic effects | 20 mg/m3 |
| | Consumers | Inhalation | Long-term local effects | 20 mg/m3 |
| | Consumers | Inhalation | Acute local effects | 40 mg/m3 |
| | Consumers | Dermal | Long-term systemic effects | 1 mg/kg |
| | Consumers | Dermal | Acute systemic effects | 1 mg/kg |
| | Consumers | Oral | Long-term systemic effects | 1,5 mg/kg |
| | Consumers | Oral | Acute systemic effects | 1,5 mg/kg |
| xylene | Workers | Inhalation | Long-term systemic effects | 221 mg/m3 |
| | Workers | Inhalation | Acute systemic effects | 442 mg/m3 |
| | Workers | Inhalation | Long-term local effects | 221 mg/m3 |
| | Workers | Inhalation | Acute local effects | 442 mg/m3 |
| | Workers | Dermal | Long-term systemic effects | 212 mg/kg |
| | Consumers | Inhalation | Long-term systemic effects | 66,3 mg/m3 |
| | Consumers | Inhalation | Acute systemic effects | 260 mg/m3 |
| | Consumers | Inhalation | Long-term local effects | 65,3 mg/m3 |
| | Consumers | Inhalation | Acute local effects | 260 mg/m3 |
| | Consumers | Dermal | Long-term systemic effects | 125 mg/m3 |
| | Consumers | Dermal | Long-term systemic effects | 12,5 mg/kg |

**Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:**

| Substance name | Environmental Compartment | Value |
|---|---|---|
| cyclohexanone | Fresh water | 0,033 mg/l |
| | Intermittent use (freshwater) | 0,329 mg/l |
| | Marine water | 0,003 mg/l |
| | Sewage treatment plant | 10 mg/l |
| | Fresh water sediment | 0,249 mg/kg dry weight (d.w.) |
| | Marine sediment | 0,025 mg/kg dry weight (d.w.) |
| | Soil | 0,03 mg/kg dry weight (d.w.) |
| xylene | Fresh water | 0,327 mg/l |

| | | |
|---|---|---|
| | Intermittent use (freshwater) | 0,327 mg/l |
| | Marine water | 0,327 mg/l |
| | Sewage treatment plant | 6,58 mg/l |
| | Fresh water sediment | 12,46 mg/kg |
| | Marine sediment | 12,46 mg/kg |

### 8.2 Exposure controls

**Personal protective equipment**

Eye/face protection : Eye wash bottle with pure water
Tightly fitting safety goggles
Wear face-shield and protective suit for abnormal processing problems.

Hand protection
Material : Wear chemical resistant gloves, such as barrier laminate, butyl rubber or nitrile rubber.

Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Skin and body protection : Impervious clothing
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Respiratory protection : In the case of dust or aerosol formation use respirator with an approved filter.

Protective measures : Plan first aid action before beginning work with this product.
Always have on hand a first-aid kit, together with proper instructions.
Wear suitable protective equipment.
When using do not eat, drink or smoke.

In the context of professional plant protection use as recommended, the end user must refer to the label and the instructions for use.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| Physical state | : | liquid |
| Colour | : | light yellow |
| Odour | : | Faint, mercaptanic-like, acetone-like |
| Melting point/freezing point | : | Crystallisation may start from 10°C downward. |
| Boiling point/boiling range | : | No data available |
| Upper explosion limit / Upper flammability limit | : | No data available |
| Lower explosion limit / Lower flammability limit | : | No data available |
| Flash point | : | 35 °C<br>Method: Pensky-Martens closed cup - PMCC |

| | | |
|---|---|---|
| Auto-ignition temperature | : | Not available for this mixture. |
| Decomposition temperature | : | not determined |
| pH | : | 4,3 - 6,6<br>Concentration: 1 %<br>(as a dispersion) |
| Viscosity | | |
| Viscosity, kinematic | : | No data available |
| Solubility(ies) | | |
| Solubility in other solvents | : | No data available |
| Partition coefficient: n-octanol/water | : | Not available for this mixture. |
| Vapour pressure | : | Not available for this mixture. |
| Density | : | 1.044 g/cm3 |
| Relative vapour density | : | Not available for this mixture. |
| Particle characteristics | | |
| Particle size | : | No data available |

**9.2 Other information**

| | | |
|---|---|---|
| Explosives | : | Not explosive |
| Oxidizing properties | : | Non-oxidizing |
| Flammability (liquids) | : | Flammable |
| Miscibility with water | : | emulsifiable |

## SECTION 10: Stability and reactivity

**10.1 Reactivity**

To our knowledge, the product has no special reactivities.

**10.2 Chemical stability**

The product (dimethoate) may decompose rapidly when heated, which can result in explosion. It is recommended never to heat the product above 35°C. Direct local heating such as electric heating or by steam must be avoided.
The decomposition is to a considerable extent dependent on time as well as temperature due to self-accelerating exothermic and autocatalytic reactions. The reactions involve rearrangements and polymerisation releasing volatile malodorous and inflammable compounds such as dimethyl sulphide and methyl mercaptan.

**10.3 Possibility of hazardous reactions**

Hazardous reactions : None known

Vapours may form explosive mixture with air.

**10.4 Conditions to avoid**

Conditions to avoid : Heat, flames and sparks.
The product can be ignited by e.g. flame, spark or hot surface.
Heating of the product will produce harmful and irritant vapours.

### 10.5 Incompatible materials

Materials to avoid : Avoid strong acids, bases, and oxidizers
The product can corrode metals (but does not meet the criteria for classification).

### 10.6 Hazardous decomposition products

See subsection 5.2.

## SECTION 11: Toxicological information

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

**Acute toxicity**

Harmful if swallowed or if inhaled.

**Product:**

Acute oral toxicity : LD50 (Rat): > 300 - 500 mg/kg
Method: OECD Test Guideline 423
Remarks: Based on data from a similar product.

Acute inhalation toxicity : LC50 (Rat): 2,8 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: FIFRA 81.03
Remarks: Based on data from a similar product.

Acute dermal toxicity : LD50 (Rat): > 2.000 mg/kg
Method: OECD Test Guideline 402

**Components:**

**dimethoate (ISO):**

Acute oral toxicity : LD50 (Rat, male and female): 348 - 423 mg/kg
Method: OECD Test Guideline 425
Symptoms: hypoactivity, Tremors

LD50 (Rat, female): 300 - 2.000 mg/kg
Method: OECD Test Guideline 423
Symptoms: hypoactivity, Tremors
GLP: yes
Assessment: The component/mixture is moderately toxic after single ingestion.

LD50 (Mouse, male and female): 160 mg/kg
Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat): ca. 1,6 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist

LC50 (Rat): 3 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Rat, female): > 2.000 mg/kg
Symptoms: Tremors
Assessment: The component/mixture is minimally toxic after single contact with skin.
Remarks: no mortality

LD50 (Rat, male and female): > 2.000 mg/kg
Method: OECD Test Guideline 402
GLP: yes
Assessment: The component/mixture is minimally toxic after single contact with skin.
Remarks: no mortality

**cyclohexanone:**

Acute inhalation toxicity : LC50 (Rat, male and female): > 6,2 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Assessment: The component/mixture is moderately toxic after short term inhalation.

**xylene:**

Acute oral toxicity : LD50 (Rat, male): 3.523 mg/kg
Method: Regulation (EC) No. 440/2008, Annex, B.1 bis

LD50 (Rat, female): > 4.000 mg/kg
Method: Regulation (EC) No. 440/2008, Annex, B.1 bis

Acute inhalation toxicity : LC50 (Rat, male and female): 27,6 mg/l, 6350 ppm
Exposure time: 4 h
Test atmosphere: vapour
Method: Regulation (EC) No. 440/2008, Annex, B.2

Acute dermal toxicity : LD50 (Rabbit, male): > 4.200 mg/kg

**Skin corrosion/irritation**

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

**Product:**

Species : Rabbit
Assessment : No skin irritation
Method : OECD Test Guideline 404
Remarks : Minimal effects that do not meet the threshold for classification.

**Components:**

**dimethoate (ISO):**

| | | |
|---|---|---|
| Species | : | Rabbit |
| Assessment | : | Not classified as irritant |
| Method | : | OECD Test Guideline 404 |
| Result | : | slight or no skin irritation. |

**xylene:**

| | | |
|---|---|---|
| Species | : | Rabbit |
| Result | : | Skin irritation |
| Remarks | : | Based on data from similar materials |

**Serious eye damage/eye irritation**

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

**Product:**

| | | |
|---|---|---|
| Species | : | Rabbit |
| Assessment | : | No eye irritation |
| Method | : | OECD Test Guideline 405 |
| Remarks | : | Minimal effects that do not meet the threshold for classification. |

**Respiratory or skin sensitisation**

**Skin sensitisation**

May cause an allergic skin reaction.

**Respiratory sensitisation**

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

**Product:**

| | | |
|---|---|---|
| Species | : | Guinea pig |
| Assessment | : | The product is a skin sensitiser, sub-category 1B. |
| Method | : | OECD Test Guideline 406 |
| Remarks | : | Based on data from a similar product. |

**Components:**

**dimethoate (ISO):**

| | | |
|---|---|---|
| Test Type | : | Maximisation Test |
| Exposure routes | : | Dermal |
| Species | : | Guinea pig |
| Assessment | : | Not a skin sensitizer. |
| Method | : | OECD Test Guideline 406 |
| Result | : | Does not cause skin sensitisation. |
| GLP | : | yes |

| | | |
|---|---|---|
| Test Type | : | Local lymph node test |
| Assessment | : | Not a skin sensitizer. |
| Method | : | OECD Test Guideline 429 |
| Result | : | Does not cause skin sensitisation. |

**xylene:**

| | | |
|---|---|---|
| Test Type | : | Local lymph node assay (LLNA) |
| Exposure routes | : | Skin contact |
| Species | : | Mouse |
| Method | : | OECD Test Guideline 429 |
| Result | : | Does not cause skin sensitisation. |

**Germ cell mutagenicity**

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

**Product:**

| | | |
|---|---|---|
| Genotoxicity in vitro | : | Test Type: gene mutation test<br>Test system: Saccharomyces cerevisiae<br>Result: negative |
| Genotoxicity in vivo | : | Test Type: Micronucleus test<br>Result: negative |

**Components:**

**dimethoate (ISO):**

| | | |
|---|---|---|
| Genotoxicity in vitro | : | Test Type: Ames test<br>Test system: Salmonella typhimurium<br>Metabolic activation: with and without metabolic activation<br>Result: negative |
| Genotoxicity in vivo | : | Test Type: unscheduled DNA synthesis assay<br>Species: Rat<br>Cell type: Liver cells<br>Result: positive<br><br>Test Type: dominant lethal test<br>Species: Mouse<br>Method: OECD Test Guideline 478<br>Result: negative<br>GLP: yes<br><br>Test Type: Micronucleus test<br>Species: Mouse<br>Method: OECD Test Guideline 474<br>Result: negative<br>GLP: yes<br><br>Test Type: chromosome aberration assay<br>Species: Rat<br>Result: negative |

**cyclohexanone:**

| | | |
|---|---|---|
| Genotoxicity in vitro | : | Test Type: in vitro DNA damage and/or repair study<br>Test system: human diploid fibroblasts<br>Method: OECD Test Guideline 482 |

Result: negative

Test Type: reverse mutation assay
Method: OECD Test Guideline 471
Result: negative

Test Type: In vitro mammalian cell gene mutation test
Method: OECD Test Guideline 476
Result: negative

Genotoxicity in vivo : Test Type: chromosome aberration assay
Species: Rat (male and female)
Application Route: inhalation (vapour)
Method: OECD Test Guideline 475
Result: negative

Test Type: dominant lethal test
Species: Rat (male and female)
Application Route: inhalation (vapour)
Method: OECD Test Guideline 478
Result: negative

Species: Drosophila melanogaster (vinegar fly) (male and female)
Application Route: Inhalation
Method: OECD Test Guideline 477
Result: negative

Germ cell mutagenicity- Assessment : Weight of evidence does not support classification as a germ cell mutagen.

**xylene:**

Genotoxicity in vitro : Test Type: Chromosome aberration test in vitro
Test system: Chinese hamster ovary cells
Method: Regulation (EC) No. 440/2008, Annex, B.10
Result: negative

Test Type: sister chromatid exchange assay
Test system: Chinese hamster ovary cells
Result: negative

Genotoxicity in vivo : Test Type: Rodent Dominant Lethal Assay
Species: Mouse (male)
Application Route: Intraperitoneal injection
Method: OECD Test Guideline 478
Result: negative

**Carcinogenicity**

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

**Components:**

**cyclohexanone:**

| | | |
|---|---|---|
| Species | : | Rat |
| Application Route | : | Oral |
| Exposure time | : | 104 weeks |
| Dose | : | (462 and 910 mg/kg/d |
| LOAEL | : | 3.300 ppm |
| Result | : | positive |
| Carcinogenicity - Assessment | : | Weight of evidence does not support classification as a carcinogen |

**xylene:**

| | | |
|---|---|---|
| Species | : | Rat |
| Application Route | : | Oral |
| Exposure time | : | 103 weeks |
| Result | : | negative |

**Reproductive toxicity**

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

**Components:**

**dimethoate (ISO):**

Effects on fertility : Test Type: Two-generation study
Species: Rat
Dose: 1, 15, 65 parts per million
General Toxicity F1: LOAEL: 15 ppm
Symptoms: Effects on mating performance
GLP: yes

Test Type: Two-generation study
Species: Rat
Dose: 0.2, 1, 6.5 mg/kg bw/day
General Toxicity - Parent: NOAEL: 1 mg/kg body weight
Early Embryonic Development: NOAEL: 6,5 mg/kg body weight
Method: OECD Test Guideline 416
GLP: yes

Test Type: one-generation reproductive toxicity
Species: Rat
Application Route: Oral
Dose: 6.5 mg/kg bw/day
General Toxicity - Parent: LOAEL: 6,5 mg/kg bw/day
Symptoms: Effects on mating performance
Method: OECD Test Guideline 415
GLP: yes

**cyclohexanone:**

| | | |
|---|---|---|
| Effects on fertility | : | Test Type: Two-generation study<br>Species: Rat<br>Application Route: inhalation (vapour)<br>Dose: 1.02, 2.04, 4.1 mg/l<br>General Toxicity - Parent: NOAEC: 4,1 mg/l<br>General Toxicity F1: NOAEC: 2,04 mg/l<br>General Toxicity F2: NOAEC: 2,04 mg/l<br>Result: negative |
| Effects on foetal development | : | Species: Rabbit<br>Application Route: Oral<br>Dose: 50, 250, 500 mg/kg b.w.<br>General Toxicity Maternal: NOAEL: 250 mg/kg body weight<br>Teratogenicity: NOAEL: 500 mg/kg body weight<br>Method: OECD Test Guideline 414<br>Result: No teratogenic effects |
| Reproductive toxicity - Assessment | : | Animal testing did not show any effects on fertility. |

**xylene:**

| | | |
|---|---|---|
| Effects on fertility | : | Test Type: Two-generation study<br>Species: Rat<br>Application Route: inhalation (vapour)<br>General Toxicity F1: NOAEC: 2,171 mg/l<br>Result: negative<br>Remarks: Based on data from similar materials |
| Effects on foetal development | : | Test Type: Pre-natal<br>Species: Rat<br>Application Route: inhalation (vapour)<br>Symptoms: Maternal effects<br>Result: negative<br>Remarks: Based on data from similar materials |

**STOT - single exposure**

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

**STOT - repeated exposure**

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

**Components:**

**cyclohexanone:**

| | | |
|---|---|---|
| Assessment | : | The substance or mixture is not classified as specific target organ toxicant, repeated exposure. |

**Repeated dose toxicity**

**Components:**

**dimethoate (ISO):**

| | | |
|---|---|---|
| Species | : | Rat |
| LOAEL | : | 2.5 mg/kg bw/day |
| Exposure time | : | 90 days |
| Symptoms | : | cholinesterase inhibition |

| | | |
|---|---|---|
| Species | : | Rat |
| NOAEL | : | 0.06 - 0.08 mg/kg bw/day |
| LOAEL | : | 3.22 - 3.78 mg/kg bw/day |
| Exposure time | : | 90d |
| Symptoms | : | cholinesterase inhibition |

**cyclohexanone:**

| | | |
|---|---|---|
| Species | : | Rat, male and female |
| NOAEL | : | 143 mg/kg |
| Application Route | : | Oral |
| Exposure time | : | 90 d |
| Dose | : | 40, 143 and 407 mg/kg b.w. |
| Method | : | OECD Test Guideline 408 |

**xylene:**

| | | |
|---|---|---|
| Species | : | Rat |
| NOAEC | : | 3,515 mg/l |
| Application Route | : | Inhalation |
| Exposure time | : | 13 weeks |

**Aspiration toxicity**

May be fatal if swallowed and enters airways.

**Product:**

May be fatal if swallowed and enters airways.

**Components:**

**dimethoate (ISO):**

The substance does not have properties associated with aspiration hazard potential.

### 11.2 Information on other hazards

**Endocrine disrupting properties**

**Product:**

| | | |
|---|---|---|
| Assessment | : | The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. |

**Components:**

**dimethoate (ISO):**

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

**Experience with human exposure**

**Components:**

**xylene:**

General Information : Target Organs: inner ear
Symptoms: hearing loss

Target Organs: Central nervous system
Symptoms: Drowsiness, Dizziness

**Neurological effects**

**Components:**

**dimethoate (ISO):**

Remarks : Neurotoxity observed in animals studies

**Further information**

**Product:**

Remarks : On contact, the first symptoms to appear may be irritation and allergic reactions. Symptoms of cholinesterase inhibition: nausea, headache, vomiting, cramps, weakness, blurred vision, pin-point pupils, tightness in chest, laboured breathing, nervousness, sweating, watering of eyes, drooling or frothing of mouth and nose, muscle spasms and coma.

Remarks : Solvents may degrease the skin.

**Components:**

**dimethoate (ISO):**

Remarks : Dimethoate is rapidly absorbed and excreted following oral administration. It is extensively metabolised. Dimethoate and its metabolites are primarily found in the liver and kidneys. There is no evidence for accumulation.

## SECTION 12: Ecological information

### 12.1 Toxicity

**Product:**

| | | |
|---|---|---|
| Toxicity to fish | : | LC50 (Oncorhynchus mykiss (rainbow trout)): 61,3 mg/l<br>Exposure time: 96 h<br>Remarks: Based on data from a similar product. |
| Toxicity to daphnia and other aquatic invertebrates | : | EC50 (Daphnia magna (Water flea)): 5,44 mg/l<br>Exposure time: 48 h<br>Remarks: Based on data from similar materials |
| Toxicity to algae/aquatic plants | : | EC50 (Selenastrum capricornutum (green algae)): 233 mg/l<br>Exposure time: 72 h<br>Remarks: Based on data from similar materials |
| Toxicity to fish (Chronic toxicity) | : | NOEC: 0,72 mg/l<br>Exposure time: 21 d<br>Species: Oncorhynchus mykiss (rainbow trout)<br>Remarks: Based on data from similar materials |
| Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) | : | NOEC: 0,06 mg/l<br>Exposure time: 21 d<br>Species: Daphnia magna (Water flea)<br>Remarks: Based on data from similar materials |
| Toxicity to soil dwelling organisms | : | LC50: 271 mg/kg<br>Exposure time: 14 d<br>Species: Eisenia fetida (earthworms)<br>Remarks: Based on data from similar materials |
| Toxicity to terrestrial organisms | : | LC50: 0,214 µg/bee<br>Exposure time: 48 h<br>End point: Acute contact toxicity<br>Species: Apis mellifera (bees)<br><br>LC50: 0,127 µg/bee<br>Exposure time: 48 h<br>End point: Acute oral toxicity<br>Species: Apis mellifera (bees) |

**Components:**

**dimethoate (ISO):**

| | | |
|---|---|---|
| Toxicity to fish | : | NOEC (Cyprinodon variegatus (sheepshead minnow)): 2,4 mg/l<br>Test Type: Early-life Stage<br>GLP: yes |
| Toxicity to daphnia and other aquatic invertebrates | : | EC50 (Daphnia magna (Water flea)): 0,48 - 0,66 mg/l<br>Exposure time: 48 h |

Test Type: static test

NOEC (Daphnia magna (Water flea)): 0,04 mg/l
Exposure time: 21 d

LC50 (Mysidopsis bahia (opossum shrimp)): 15 mg/l
Exposure time: 96 h
Test Type: static test
Method: US EPA Test Guideline OPP 72-3
GLP: yes

EC50 (Daphnia magna (Water flea)): 1,6 - 2,5 mg/l
Exposure time: 48 h
Test Type: static test
Method: OECD Test Guideline 202
GLP: yes

NOEC (Crassostrea virginica (atlantic oyster)): 46 mg/l
Exposure time: 96 h

Toxicity to algae/aquatic plants : EC50 (Selenastrum capricornutum (green algae)): 117 mg/l
End point: Growth inhibition
Exposure time: 72 h
Method: OECD Test Guideline 201

EC50 (Pseudokirchneriella subcapitata (algae)): > 95 mg/l
Exposure time: 72 h
Test Type: static test
Method: OECD Test Guideline 201

EC50 (Navicula pelliculosa (Diatom)): > 98 mg/l
Exposure time: 72 h
Method: US EPA Test Guideline OPPTS 850.5400
GLP: yes

NOEC (Lemna gibba (duckweed)): 41,5 mg/l
Exposure time: 7 d
Test Type: Static renewal test
Method: OECD Test Guideline 221
GLP: yes

M-Factor (Acute aquatic toxicity) : 1

Toxicity to fish (Chronic toxicity) : NOEC: 0,4 mg/l
Exposure time: 21 d
Species: Oncorhynchus mykiss (rainbow trout)

NOEC: 2,4 mg/l
Species: Cyprinodon variegatus (sheepshead minnow)
Test Type: Early-life Stage
GLP: yes

NOEC: 1,25 mg/l
Species: Oncorhynchus mykiss (rainbow trout)
Test Type: Early Life-Stage
Method: OECD Test Guideline 210
GLP: yes

LOEC: 96 mg/l
Exposure time: 21 d
Species: Pimephales promelas (fathead minnow)
Method: OECD Test Guideline 229
GLP: yes

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 0,04 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)

NOEC: 0,14 mg/l
Exposure time: 32 d
Species: Americamysis bahia (mysid shrimp)
Test Type: flow-through test
GLP: yes

Toxicity to soil dwelling organisms : LC50: 31 mg/kg
Exposure time: 14 d
Species: Eisenia fetida (earthworms)
Method: OECD Test Guideline 207
GLP:yes

NOEC: 2,87 mg/kg
Exposure time: 28 d
End point: reproduction
Species: Eisenia fetida (earthworms)
GLP:yes

Toxicity to terrestrial organisms : LD50: 44 mg/kg
End point: Acute oral toxicity
Species: Anas platyrhynchos (Mallard duck)
Method: US EPA Test Guideline OPPTS 850.2100

NOEC: 35,4 ppm
End point: Reproduction Test
Species: Anas platyrhynchos (Mallard duck)
Method: OECD Test Guideline 206
GLP:yes

LD50: 17,3 mg/kg
End point: Acute oral toxicity
Species: Colinus virginianus (Bobwhite quail)
Method: EPA OPP 71-2 (Avian Dietary Toxicity Test)
GLP:yes

NOEC: 10,1 ppm
End point: Reproduction Test

Species: Colinus virginianus (Bobwhite quail)
Method: OECD Test Guideline 206
GLP:yes

LD50: 12 µg/bee
End point: Acute contact toxicity
Species: Apis mellifera (bees)
Method: OECD Test Guideline 214
GLP:yes

LD50: 4 µg/bee
End point: Acute oral toxicity
Species: Apis mellifera (bees)
Method: OECD Test Guideline 213
GLP:yes

**Ecotoxicology Assessment**

Chronic aquatic toxicity : Very toxic to aquatic life with long lasting effects.

**cyclohexanone:**

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 527 - 732 mg/l
Exposure time: 96 h
Test Type: flow-through test

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 100 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202
Remarks: Based on data from similar materials

Toxicity to algae/aquatic plants : EC50 (Desmodesmus subspicatus (green algae)): > 100 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201
Remarks: Based on data from similar materials

NOEC (Desmodesmus subspicatus (green algae)): > 100 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201
Remarks: Based on data from similar materials

Toxicity to microorganisms : EC50 (activated sludge): > 1.000 mg/l
Exposure time: 30 min
Method: OECD Test Guideline 209

**xylene:**

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 2,6 mg/l
Exposure time: 96 h
Test Type: Static renewal test
Method: OECD Test Guideline 203
Remarks: Based on data from similar materials

| | | |
|---|---|---|
| Toxicity to algae/aquatic plants | : | EC50 (Pseudokirchneriella subcapitata (green algae)): 2,2 mg/l<br>Exposure time: 72 h<br>Test Type: static test<br>Method: OECD Test Guideline 201<br>Remarks: Based on data from similar materials<br><br>NOEC (Pseudokirchneriella subcapitata (green algae)): 0,44 mg/l<br>Exposure time: 72 h<br>Test Type: static test<br>Method: OECD Test Guideline 201<br>Remarks: Based on data from similar materials |
| Toxicity to microorganisms | : | NOEC (activated sludge): 16 mg/l<br>Exposure time: 28 h<br>Method: OECD Test Guideline 301F |
| Toxicity to fish (Chronic toxicity) | : | NOEC: > 1,3 mg/l<br>Exposure time: 56 d<br>Species: Oncorhynchus mykiss (rainbow trout)<br>Test Type: flow-through test<br>Remarks: Based on data from similar materials |
| Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) | : | NOEC: 0,96 mg/l<br>Exposure time: 7 d<br>Species: Ceriodaphnia dubia (water flea)<br>Remarks: Based on data from similar materials |
| Toxicity to soil dwelling organisms | : | NOEC: 16 mg/kg<br>Exposure time: 14 d<br>Species: Eisenia fetida (earthworms)<br>Remarks: Based on data from similar materials |

### 12.2 Persistence and degradability

**Product:**

| | | |
|---|---|---|
| Biodegradability | : | Remarks: No data is available on the product itself. |

**Components:**

**dimethoate (ISO):**

| | | |
|---|---|---|
| Biodegradability | : | Result: Not readily biodegradable. |

**cyclohexanone:**

| | | |
|---|---|---|
| Biodegradability | : | Result: Readily biodegradable.<br>Method: OECD Test Guideline 301F |

**xylene:**

| | | |
|---|---|---|
| Biodegradability | : | Test Type: aerobic |

Inoculum: activated sludge, non-adapted
Concentration: 16 mg/l
Result: Readily biodegradable.
Biodegradation: 98 %
Exposure time: 28 d
Method: OECD Test Guideline 301F
Remarks: Based on data from similar materials

Test Type: aerobic
Inoculum: activated sludge, non-adapted
Concentration: 16 mg/l
Result: Readily biodegradable.
Biodegradation: 94 %
Exposure time: 28 d
Method: OECD Test Guideline 301F
Remarks: Based on data from similar materials

Test Type: aerobic
Inoculum: activated sludge, non-adapted
Concentration: 16,2 mg/l
Result: Readily biodegradable.
Biodegradation: 90 %
Exposure time: 28 d
Method: OECD Test Guideline 301F
Remarks: Based on data from similar materials

### 12.3 Bioaccumulative potential

**Product:**

Bioaccumulation : Remarks: No data is available on the product itself.

**Components:**

**dimethoate (ISO):**

Bioaccumulation : Species: Salmo gairdneri
Bioconcentration factor (BCF): > 1.000
Remarks: The product/substance has a potential to bioaccumulate.
See section 9 for octanol-water partition coefficient.

Partition coefficient: n-octanol/water : Pow: 5,7 (20 °C)
log Pow: 0,75 (20 °C)
Method: OECD Test Guideline 107

**cyclohexanone:**

Partition coefficient: n-octanol/water : log Pow: 0,86 (25 °C)

**xylene:**

Bioaccumulation : Species: Oncorhynchus mykiss (rainbow trout)

Exposure time: 7 d
Concentration: 1,3 mg/l
Bioconcentration factor (BCF): > 4,9
Remarks: Based on data from similar materials

Partition coefficient: n-octanol/water : log Pow: 3,2 (20 °C)
pH: 7
Remarks: Based on data from similar materials

log Pow: 3,12 (20 °C)
pH: 7
Remarks: Based on data from similar materials

log Pow: 3,15 (20 °C)
pH: 7
Remarks: Based on data from similar materials

log Pow: 3,15 (20 °C)
pH: 7
Remarks: Based on data from similar materials

### 12.4 Mobility in soil

**Product:**

Distribution among environmental compartments : Remarks: No data is available on the product itself.

**Components:**

**dimethoate (ISO):**

Distribution among environmental compartments : Remarks: Highly mobile in soils

Stability in soil : Remarks: Not expected to adsorb on soil.

### 12.5 Results of PBT and vPvB assessment

**Product:**

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.

**Components:**

**dimethoate (ISO):**

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 : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

**Components:**

**dimethoate (ISO):**

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

### 12.7 Other adverse effects

**Product:**

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Very toxic to aquatic life with long lasting effects.

**Components:**

**dimethoate (ISO):**

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Very toxic to aquatic life with long lasting effects.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Product : The product should not be allowed to enter drains, water courses or the soil.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Send to a licensed waste management company.

Dimethoate is rapidly hydrolysed at pH > 8.0

Contaminated packaging : Empty remaining contents.
Do not re-use empty containers.
Packaging that is not properly emptied must be disposed of as the unused product.
Empty containers should be taken to an approved waste handling site for recycling or disposal.

## SECTION 14: Transport information

### 14.1 UN number or ID number

| | | |
|---|---|---|
| **ADN** | : | UN 1993 |
| **ADR** | : | UN 1993 |
| **RID** | : | UN 1993 |
| **IMDG** | : | UN 1993 |
| **IATA** | : | UN 1993 |

### 14.2 UN proper shipping name

| | | |
|---|---|---|
| **ADN** | : | FLAMMABLE LIQUID, N.O.S.<br>(Cyclohexanone, Xylene, Dimethoate) |
| **ADR** | : | FLAMMABLE LIQUID, N.O.S.<br>(Cyclohexanone, Xylene, Dimethoate) |
| **RID** | : | FLAMMABLE LIQUID, N.O.S.<br>(Cyclohexanone, Xylene, Dimethoate) |
| **IMDG** | : | FLAMMABLE LIQUID, N.O.S.<br>(Cyclohexanone, Xylene, Dimethoate) |
| **IATA** | : | Flammable liquid, n.o.s.<br>(Cyclohexanone, Xylene, Dimethoate) |

### 14.3 Transport hazard class(es)

| | | Class | Subsidiary risks |
|---|---|---|---|
| **ADN** | : | 3 | |
| **ADR** | : | 3 | |
| **RID** | : | 3 | |
| **IMDG** | : | 3 | |
| **IATA** | : | 3 | |

### 14.4 Packing group

**ADN**

| | | |
|---|---|---|
| Packing group | : | III |
| Classification Code | : | F1 |
| Hazard Identification Number | : | 30 |
| Labels | : | 3 |

**ADR**

| | | |
|---|---|---|
| Packing group | : | III |
| Classification Code | : | F1 |
| Hazard Identification Number | : | 30 |
| Labels | : | 3 |
| Tunnel restriction code | : | (D/E) |

**RID**

| | | |
|---|---|---|
| Packing group | : | III |

| | | |
|---|---|---|
| Classification Code | : | F1 |
| Hazard Identification Number | : | 30 |
| Labels | : | 3 |

**IMDG**

| | | |
|---|---|---|
| Packing group | : | III |
| Labels | : | 3 |
| EmS Code | : | F-E, S-E |

**IATA (Cargo)**

| | | |
|---|---|---|
| Packing instruction (cargo aircraft) | : | 366 |
| Packing instruction (LQ) | : | Y344 |
| Packing group | : | III |
| Labels | : | Flammable Liquids |

**IATA (Passenger)**

| | | |
|---|---|---|
| Packing instruction (passenger aircraft) | : | 355 |
| Packing instruction (LQ) | : | Y344 |
| Packing group | : | III |
| Labels | : | Flammable Liquids |

### 14.5 Environmental hazards

**ADN**
Environmentally hazardous : yes

**ADR**
Environmentally hazardous : yes

**RID**
Environmentally hazardous : yes

**IMDG**
Marine pollutant : yes

**IATA (Passenger)**
Environmentally hazardous : yes

**IATA (Cargo)**
Environmentally hazardous : yes

### 14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

### 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

| | | |
|---|---|---|
| REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII) | : | Conditions of restriction for the following entries should be considered:<br>Number on list 75, 3<br><br>cyclohexanone (Number on list 3)<br><br>If you intend to use this product as tattoo ink, please contact your vendor. |
| REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). | : | Not applicable |
| Regulation (EC) on substances that deplete the ozone layer | : | Not applicable |
| Regulation (EU) 2019/1021 on persistent organic pollutants (recast) | : | Not applicable |
| Regulation (EU) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals | : | dimethoate (ISO)<br>cyclohexanone |
| REACH - List of substances subject to authorisation (Annex XIV) | : | Not applicable |

| | | |
|---|---|---|
| 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 |
| | P5c | |
| Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances. | P5c | FLAMMABLE LIQUIDS |

**Other regulations:**

When evaluating a workplace, measures must be taken to ensure that employees are not exposed to conditions that may pose a risk during pregnancy or breastfeeding (cf. The Danish Working Environment Authority's Executive Order on The Performance of Work)

Young people under the age of 18 are not allowed to use or be exposed to the product professionally. Young people above the age of 15 are, however, except from this rule if the product is a necessary part of their education.

**The components of this product are reported in the following inventories:**

| | | |
|---|---|---|
| TCSI | : | On the inventory, or in compliance with the inventory |
| TSCA | : | All substances listed as active on the TSCA inventory |
| AIIC | : | Not in compliance with the inventory |
| DSL | : | This product contains the following components listed on the Canadian NDSL. All other components are on the Canadian DSL.<br><br>dimethoate (ISO) |
| ENCS | : | Not in compliance with the inventory |
| ISHL | : | Not in compliance with the inventory |
| KECI | : | On the inventory, or in compliance with the inventory |
| PICCS | : | On the inventory, or in compliance with the inventory |
| IECSC | : | On the inventory, or in compliance with the inventory |
| NZIoC | : | Not in compliance with the inventory |
| TECI | : | Not in compliance with the inventory |

### 15.2 Chemical safety assessment

A chemical safety assessment is not required for this product (mixture).

## SECTION 16: Other information

**Full text of H-Statements**

| | | |
|---|---|---|
| H226 | : | Flammable liquid and vapour. |
| H242 | : | Heating may cause a fire. |
| H302 | : | Harmful if swallowed. |
| H312 | : | Harmful in contact with skin. |
| H315 | : | Causes skin irritation. |
| H332 | : | Harmful if inhaled. |
| H410 | : | Very toxic to aquatic life with long lasting effects. |
| H412 | : | Harmful to aquatic life with long lasting effects. |

**Full text of other abbreviations**

| | | |
|---|---|---|
| Acute Tox. | : | Acute toxicity |
| Aquatic Chronic | : | Long-term (chronic) aquatic hazard |
| Flam. Liq. | : | Flammable liquids |
| Self-react. | : | Self-reactive substances and mixtures |
| Skin Irrit. | : | Skin irritation |
| 2000/39/EC | : | Europe. Commission Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values |
| DK OEL | : | Denmark. Occupational Exposure Limits |
| 2000/39/EC / TWA | : | Limit Value - eight hours |

| | | |
|---|---|---|
| 2000/39/EC / STEL | : | Short term exposure limit |
| DK OEL / S | : | Exposure period of 15 minutes |
| DK OEL / GV | : | Long term exposure limit |

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; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; 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; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

**Further information**

| **Classification of the mixture:** | | **Classification procedure:** |
|---|---|---|
| Flam. Liq. 3 | H226 | Based on product data or assessment |
| Acute Tox. 4 | H302 | Based on product data or assessment |
| Acute Tox. 4 | H332 | Based on product data or assessment |
| Skin Sens. 1B | H317 | Based on product data or assessment |
| Asp. Tox. 1 | H304 | Based on product data or assessment |
| Aquatic Chronic 1 | H410 | Based on product data or assessment |

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