

# SAFETY DATA SHEET

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

#### 1.1. Product identifier

Product name : MULTI DCTF Product code : 45611northamerica

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

4-stroke engine lubricant

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

Registered company name : MOTUL.

Address : 119 BOULEVARD FELIX FAURE.93300.AUBERVILLIERS CEDEX.FRANCE. Telephone : +33 (0)1.48.11.70.00. Fax : +33 (0)1.48.33.28.79. Email: motul\_hse@motul.fr

## 1.4. Emergency telephone number : +44 (0) 1235 239 670.

Association/Organisation : .

### Other emergency numbers

BRAZIL : +55 11 3197 5891 / COLOMBIA : +57 1 508 7337 / ARGENTINA : +54 11 5984 3690 / CHILE : +562 2582 9336 Ireland : +353 1 8092566 UNITED STATES: 001 866 928 0789 / CANADA: 001 800 579 7421 / MEXICO : +52 55 5004 8763 / MIDDLE EAST - AFRICA : +44 1235 239671 24 hours a day, 7 days a week

# SECTION 2 : HAZARDS IDENTIFICATION

## 2.1. Classification of the substance or mixture

#### HCS compliant.

Skin sensitisation, Category 1 (Skin Sens. 1).

This mixture does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.

## 2.2. Label elements

## HCS compliant.

Hazard pictograms :



| Signal Word :<br>WARNING<br>Product identifiers : |                                                                                        |  |
|---------------------------------------------------|----------------------------------------------------------------------------------------|--|
| CAS 93882-40-7                                    | 4,4'-THIODIETHYLENE HYDROGEN -2-OCTADECENYLSUCCINATE                                   |  |
| Hazard statements :                               |                                                                                        |  |
| H317                                              | May cause an allergic skin reaction.                                                   |  |
| Precautionary statements - G                      | eneral :                                                                               |  |
| P101                                              | If medical advice is needed, have product container or label at hand.                  |  |
| P102                                              | Keep out of reach of children.                                                         |  |
| Precautionary statements - Prevention :           |                                                                                        |  |
| P280                                              | Wear protective gloves/protective clothing/eye protection/face protection.             |  |
| Precautionary statements - Re                     | esponse :                                                                              |  |
| P302 + P352                                       | IF ON SKIN: Wash with plenty of water                                                  |  |
| P333 + P313                                       | If skin irritation or rash occurs: Get medical advice/attention.                       |  |
| Precautionary statements - Di                     | sposal :                                                                               |  |
| P501                                              | Dispose of contents/container in accordance with local/regional/national/international |  |

## regulations.

## 2.3. Other hazards

No data available.

## SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

## 3.2. Mixtures

## Composition :

| Identification                           | HCS                 | Nota | %               |
|------------------------------------------|---------------------|------|-----------------|
| CAS: 72623-87-1                          | GHS08               |      | 50 <= x % < 100 |
| EC: 276-738-4                            | Dgr                 |      |                 |
| REACH: 01-2119474889-13                  | Asp. Tox. 1, H304   |      |                 |
| LUBRICATING OILS (PETROLEUM),            |                     |      |                 |
| C20-50, HYDROTREATED NEUTRAL             |                     |      |                 |
| OIL-BASED                                |                     |      |                 |
| CAS: 72623-87-1                          | GHS08               |      | 25 <= x % < 50  |
| EC: 276-738-4                            | Dgr                 |      |                 |
| REACH: 01-2119474889-13-XXXX             | Asp. Tox. 1, H304   |      |                 |
| LUBRICATING OILS (PETROLEUM),            |                     |      |                 |
| C20-50, HYDROTREATED NEUTRAL             |                     |      |                 |
| OIL-BASED                                |                     |      |                 |
| CAS: 68784-17-8                          | GHS07               |      | 1 <= x % < 2.5  |
| EC: 272-225-4                            | Wng                 |      |                 |
| REACH: 01-2119960832-33                  | Skin Irrit. 2, H315 |      |                 |
|                                          | Eye Irrit. 2B, H320 |      |                 |
| ACIDE ISO-OCTANDECANOÏQUE,               |                     |      |                 |
| PRODUITS DE REACTION AVEC LA             |                     |      |                 |
| TÉTRA-ÉTHYLÈNEPENTAMINE                  |                     |      |                 |
| CAS: 64742-79-6                          | GHS07, GHS08        |      | 1 <= x % < 2.5  |
| EC: 265-182-8                            | Dgr                 |      | 1 * X /0 * 2.0  |
| REACH: 01-2119471311-49                  | Asp. Tox. 1, H304   |      |                 |
|                                          | Skin Irrit. 2, H315 |      |                 |
| MINERAL OIL                              | Acute Tox. 4, H332  |      |                 |
|                                          | Acute 10x. 4, 11352 |      |                 |
| CAS: 64742-54-7                          | GHS08               |      | 1 <= x % < 2.5  |
| EC: 265-157-1                            | Dgr                 |      |                 |
| REACH: 01-2119484627-25                  | Asp. Tox. 1, H304   |      |                 |
| DISTILLATES (PETROLEUM),                 |                     |      |                 |
| HYDROTREATED HEAVY PARAFFINIC            |                     |      |                 |
| EC: 424-820-7                            | GHS07, GHS05        |      | 0 <= x % < 1    |
| REACH: 01-0000017126-75                  | Dgr                 |      |                 |
|                                          | Acute Tox. 4, H312  |      |                 |
| REACTION PRODUCT OF                      | Skin Corr. 1B, H314 |      |                 |
|                                          |                     |      |                 |
| SUBSTITUTED PHOSPHORUS COMPOU            |                     |      |                 |
| CAS: 93882-40-7                          | GHS07               |      | 0 <= x % < 1    |
| EC: 299-434-3                            | Wng                 |      |                 |
|                                          | Skin Sens. 1, H317  |      |                 |
| 4,4'-THIODIETHYLENE HYDROGEN             | Eye Irrit. 2B, H320 |      |                 |
| -2-OCTADECENYLSUCCINATE                  |                     |      |                 |
| (Full text of H-phrases: see section 16) |                     |      |                 |

(Full text of H-phrases: see section 16)

## **SECTION 4 : FIRST AID MEASURES**

As a general rule, in case of doubt or if symptoms persist, always call a doctor. NEVER induce swallowing by an unconscious person.

# 4.1. Description of first aid measures

In the event of exposure by inhalation :

Remove the victim to fresh air. If the symptoms persist, call a physician.

### In the event of splashes or contact with eyes :

Wash immediately and abundantly with water, including under the eyelids.

#### In the event of splashes or contact with skin :

Remove contaminated clothing and wash the skin thoroughly with soap and water or a recognised cleaner.

Watch out for any remaining product between skin and clothing, watches, shoes, etc.

In the event of an allergic reaction, seek medical attention.

If the contaminated area is widespread and/or there is damage to the skin, a doctor must be consulted or the patient transferred to hospital. Immediately remove all soiled clothing.

Wash immediately and abundantly with soap and water.

## In the event of swallowing :

Do not give the patient anything orally.

In the event of swallowing, if the quantity is small (no more than one mouthful), rinse the mouth with water and consult a doctor. Seek medical attention immediately, showing the label.

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

No data available.

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

No data available.

### **SECTION 5 : FIREFIGHTING MEASURES**

Non-flammable.

## 5.1. Extinguishing media

#### Suitable methods of extinction

Dry agent, foam, carbon dioxide.

#### Unsuitable methods of extinction

High volume water jet

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

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

In the event of a fire, the following may be formed :

- carbon monoxide (CO)

# - carbon dioxide (CO2)

5.3. Advice for firefighters

No data available.

## SECTION 6 : ACCIDENTAL RELEASE MEASURES

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

Consult the safety measures listed under headings 7 and 8.

Spilled product may make surfaces slippery.

# For non first aid worker

Avoid any contact with the skin and eyes.

# For first aid worker

First aid workers will be equipped with suitable personal protective equipment (See section 8).

#### 6.2. Environmental precautions

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.

Prevent any material from entering drains or waterways.

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

Clean preferably with a detergent, do not use solvents.

#### 6.4. Reference to other sections

No data available.

## SECTION 7 : HANDLING AND STORAGE

Requirements relating to storage premises apply to all facilities where the mixture is handled.

Individuals with a history of skin sensitisation should not, under any circumstance, handle this mixture.

## 7.1. Precautions for safe handling

Always wash hands after handling.

Remove and wash contaminated clothing before re-using.

Avoid contact with eyes.

No special precaution apart from the observance of hygiene rules

#### Fire prevention :

Prevent access by unauthorised personnel.

Take precautionary measures against static discharges by bonding and grounding equipment.

No smoking.

Recommended equipment and procedures :

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

Ensure good ventilation at the workplace

# Prohibited equipment and procedures :

No smoking, eating or drinking in areas where the mixture is used.

Do not breathe fumes, vapour, spray.

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

Store between 5°C and 40°C in a dry, well ventilated place.Only use hydrocarbon-resistant containers, joints and pipes.Storage limit36 months

#### Storage

Keep out of reach of children.

## Packaging

Always keep in packaging made of an identical material to the original.

## 7.3. Specific end use(s)

No data available.

## **SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION**

## 8.1. Control parameters

No data available.

Final use:

## Derived no effect level (DNEL) or derived minimum effect level (DMEL):

ACIDE ISO-OCTANDECANOÏQUE, PRODUITS DE REACTION AVEC LA TÉTRA-ÉTHYLÈNEPENTAMINE (CAS: 68784-17-8)

Workers.

| Exposure method:                           | Dermal contact.                               |
|--------------------------------------------|-----------------------------------------------|
| Potential health effects:                  | Long term systemic effects.                   |
| DNEL :                                     | 3.33 mg/kg de poids corporel/jour             |
|                                            |                                               |
| Exposure method:                           | Inhalation.                                   |
| Potential health effects:                  | Long term systemic effects.                   |
| DNEL :                                     | 11.75 mg de substance/m3                      |
| Final use:                                 | Consumers.                                    |
| Exposure method:                           | Dermal contact.                               |
| Potential health effects:                  | Long term systemic effects.                   |
| DNEL :                                     | 1.67 mg/kg de poids corporel/jour             |
| Exposure method:                           | Inhalation.                                   |
| Potential health effects:                  | Long term systemic effects.                   |
| DNEL :                                     | 2.9 mg de substance/m3                        |
| LUBRICATING OILS (PETROLEUM), C20-50, HYDF | ROTREATED NEUTRAL OIL-BASED (CAS: 72623-87-1) |
| Final use:                                 | Workers.                                      |
| Exposure method:                           | Inhalation.                                   |
| Potential health effects:                  | Long term local effects.                      |
| DNEL :                                     | 5.4 mg de substance/m3                        |
|                                            |                                               |

## Final use: Exposure method: Potential health effects: DNEL :

# Consumers.

Inhalation. Long term local effects. 1.2 mg de substance/m3

LUBRICATING OILS (PETROLEUM), C20-50, HYDROTREATED NEUTRAL OIL-BASED (CAS: 72623-87-1)

| Final use:                                | Workers.                                                  |
|-------------------------------------------|-----------------------------------------------------------|
| Exposure method:                          | Inhalation.                                               |
| Potential health effects:                 | Long term local effects.                                  |
| DNEL :                                    | 5.4 mg de substance/m3                                    |
| Final use:                                | Consumers.                                                |
| Exposure method:                          | Inhalation.                                               |
| Potential health effects:                 | Long term local effects.                                  |
| DNEL :                                    | 1.2 mg de substance/m3                                    |
| Predicted no effect concentration (PNEC): |                                                           |
| REACTION PRODUCT OF ALKYLTHIOALCOHOL AN   | D SUBSTITUTED PHOSPHORUS COMPOUND                         |
| Environmental compartment:                | Soil.                                                     |
| PNEC :                                    | 0.104 mg/kg                                               |
| Environmental compartment:                | Fresh water.                                              |
| PNEC :                                    | 0.036 mg/l                                                |
|                                           | 0.000 mg/                                                 |
| Environmental compartment:                | Fresh water sediment.                                     |
| PNEC :                                    | 0.128 mg/kg                                               |
|                                           |                                                           |
|                                           | EACTION AVEC LA TÉTRA-ÉTHYLÈNEPENTAMINE (CAS: 68784-17-8) |
| Environmental compartment:<br>PNEC :      | Soil.                                                     |
| PNEC :                                    | 10 mg/kg                                                  |
| Environmental compartment:                | Fresh water.                                              |
| PNEC :                                    | 0.46 mg/l                                                 |
|                                           |                                                           |
| Environmental compartment:                | Sea water.                                                |
| PNEC :                                    | 0.046 mg/l                                                |
| Environmental compartment:                | Intermittent waste water.                                 |
| PNEC :                                    | 0.94 mg/l                                                 |
|                                           |                                                           |
| Environmental compartment:                | Fresh water sediment.                                     |
| PNEC :                                    | 38100 mg/l                                                |
| Environmental compartment:                | Marine sediment.                                          |
| PNEC :                                    | 3810 mg/l                                                 |
|                                           |                                                           |

### 8.2. Exposure controls

#### Appropriate engineering controls

Ensure adequate ventilation, if possible with extractor fans at work posts and appropriate general extraction. Personnel shall wear regularly laundered overalls.

#### Personal protection measures, such as personal protective equipment

Pictogram(s) indicating the obligation of wearing personal protective equipment (PPE) :



Use personal protective equipment that is clean and has been properly maintained. Store personal protective equipment in a clean place, away from the work area. Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

## - Eye / face protection

Avoid contact with eyes.

Use eye protectors designed to protect against liquid splashes

Before handling, wear safety goggles in accordance with standard EN166.

## - Hand protection

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN374.

Gloves must be selected according to the application and duration of use at the workstation.

Protective gloves need to be selected according to their suitability for the workstation in question : other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required.

Type of gloves recommended :

- Nitrile rubber (butadiene-acrylonitrile copolymer rubber (NBR))

Recommended properties :

- Impervious gloves in accordance with standard EN374

## - Body protection

Avoid skin contact.

Wear suitable protective clothing.

In the event of substantial spatter, wear liquid-tight protective clothing against chemical risks (type 3) in accordance with EN14605 to prevent skin contact.

In the event of a risk of splashing, wear protective clothing against chemical risks (type 6) in accordance with EN13034 to prevent skin contact. Work clothing worn by personnel shall be laundered regularly.

After contact with the product, all parts of the body that have been soiled must be washed.

#### - Respiratory protection

Breathing apparatus only when aerosol or spray are formed.

## **SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES**

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

## General information :

| Physical state :                                       | Fluid liquid.       |
|--------------------------------------------------------|---------------------|
| Color:                                                 | pale yellow         |
| Important health, safety and environmental information |                     |
| pH :                                                   | Not relevant.       |
| Flash Point Interval :                                 | FP > 100°C (212 °F) |
| Vapour pressure (50°C) :                               | Not relevant.       |
| Density :                                              | <1                  |

Insoluble. 33.8 mm²/s à 40°C

#### Viscosity : 9 2 Other information

Water solubility :

No data available.

## SECTION 10 : STABILITY AND REACTIVITY

### 10.1. Reactivity

No data available.

## 10.2. Chemical stability

This mixture is stable under the recommended handling and storage conditions in section 7.

#### 10.3. Possibility of hazardous reactions

No data available.

#### 10.4. Conditions to avoid

Keep away from heat and from sources of ignition

Take precautionary measures against static discharges.

## 10.5. Incompatible materials

Strong oxidants

# 10.6. Hazardous decomposition products

The thermal decomposition may release/form :

- carbon monoxide (CO)
- carbon dioxide (CO2)

#### SECTION 11 : TOXICOLOGICAL INFORMATION

#### 11.1. Information on toxicological effects

May cause an allergic reaction by skin contact.

#### 11.1.1. Substances

#### Acute toxicity :

MINERAL OIL (CAS: 64742-79-6) Inhalation route (Dusts/mist) :

1 < LC50 <= 5 mg/l Species : Rat

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | e D.1) Version 12.1 (23-01-2019) - Page 7/                                                                                                                                                                                                                                                                                                                                                                                       |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Duration of exposure : 4 h                                                                                                                                                                                                                                                                                                                                                                                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 2-OCTADECENYLSUCCINATE (CAS: 93882-40-7)                                                                                                                                                                                                                                                                                                                                                                                         |
| Oral route :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | LD50 > 5000 mg/kg                                                                                                                                                                                                                                                                                                                                                                                                                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Species : Rat                                                                                                                                                                                                                                                                                                                                                                                                                    |
| REACTION PRODUCT OF ALKYLTHIC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | DALCOHOL AND SUBSTITUTED PHOSPHORUS COMPOUND                                                                                                                                                                                                                                                                                                                                                                                     |
| Oral route :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | LD50 > 2000 mg/kg                                                                                                                                                                                                                                                                                                                                                                                                                |
| Dermal route :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | LD50 > 500 mg/kg                                                                                                                                                                                                                                                                                                                                                                                                                 |
| ACIDE ISO-OCTANDECANOÏQUE, PR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | ODUITS DE REACTION AVEC LA TÉTRA-ÉTHYLÈNEPENTAMINE (CAS: 68784-17-8)                                                                                                                                                                                                                                                                                                                                                             |
| Oral route :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | LD50 > 5000 mg/kg                                                                                                                                                                                                                                                                                                                                                                                                                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Species : Rat<br>OCDE Ligne directrice 401 (Toxicité aiguë par voie orale)                                                                                                                                                                                                                                                                                                                                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Dermal route :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | LD50 > 2000 mg/kg                                                                                                                                                                                                                                                                                                                                                                                                                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Species : Rabbit<br>OCDE Ligne directrice 402 (Toxicité aiguë par voie cutanée)                                                                                                                                                                                                                                                                                                                                                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Oral route :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 20-50, HYDROTREATED NEUTRAL OIL-BASED (CAS: 72623-87-1)<br>LD50 > 5000 mg/kg                                                                                                                                                                                                                                                                                                                                                     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Species : Rat                                                                                                                                                                                                                                                                                                                                                                                                                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | OCDE Ligne directrice 401 (Toxicité aiguë par voie orale)                                                                                                                                                                                                                                                                                                                                                                        |
| Dermal route :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | LD50 > 2000 mg/kg                                                                                                                                                                                                                                                                                                                                                                                                                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Species : Rabbit                                                                                                                                                                                                                                                                                                                                                                                                                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | OCDE Ligne directrice 402 (Toxicité aiguë par voie cutanée)                                                                                                                                                                                                                                                                                                                                                                      |
| Inhalation route (n/a):                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | LC50 > 5.53 mg/l                                                                                                                                                                                                                                                                                                                                                                                                                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Species : Rat<br>OCDE Ligne directrice 403 (Toxicité aiguë par inhalation)                                                                                                                                                                                                                                                                                                                                                       |
| kin corrosion/skin irritation :<br>ACIDE ISO-OCTANDECANOÏQUE, PR                                                                                                                                                                                                                                                                                                                                                                                                                                                                | ODUITS DE REACTION AVEC LA TÉTRA-ÉTHYLÈNEPENTAMINE (CAS: 68784-17-8)<br>Effect observed : Irritation globale<br>Species : Rabbit                                                                                                                                                                                                                                                                                                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | OCDE Ligne directrice 404 (Effet irritant/corrosif aigu sur la peau.)                                                                                                                                                                                                                                                                                                                                                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | OCDE Ligne directrice 404 (Effet irritant/corrosif aigu sur la peau.)                                                                                                                                                                                                                                                                                                                                                            |
| 1.1.2. Mixture                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | OCDE Ligne directrice 404 (Effet irritant/corrosif aigu sur la peau.)                                                                                                                                                                                                                                                                                                                                                            |
| kin corrosion/skin irritation :<br>Repeated or prolonged contact with the p                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| kin corrosion/skin irritation :<br>Repeated or prolonged contact with the p<br>absorption through the skin.                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| kin corrosion/skin irritation :<br>Repeated or prolonged contact with the p                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| kin corrosion/skin irritation :<br>Repeated or prolonged contact with the p<br>absorption through the skin.<br>erious damage to eyes/eye irritation :                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| kin corrosion/skin irritation :<br>Repeated or prolonged contact with the p<br>absorption through the skin.<br>erious damage to eyes/eye irritation :<br>Mild eye irritation<br>spiration hazard :<br>"Inhalation of vapours may cause irritation                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| kin corrosion/skin irritation :<br>Repeated or prolonged contact with the p<br>absorption through the skin.<br>erious damage to eyes/eye irritation :<br>Mild eye irritation<br>spiration hazard :<br>"Inhalation of vapours may cause irritation<br>May cause lung damage if swallowed                                                                                                                                                                                                                                         | preparation may cause removal of natural fat from the skin resulting in non allergic contact dermatitis a                                                                                                                                                                                                                                                                                                                        |
| kin corrosion/skin irritation :<br>Repeated or prolonged contact with the p<br>absorption through the skin.<br>erious damage to eyes/eye irritation :<br>Mild eye irritation<br>spiration hazard :<br>"Inhalation of vapours may cause irritation<br>May cause lung damage if swallowed<br>onograph(s) from the IARC (Internation                                                                                                                                                                                               | preparation may cause removal of natural fat from the skin resulting in non allergic contact dermatitis a                                                                                                                                                                                                                                                                                                                        |
| kin corrosion/skin irritation :<br>Repeated or prolonged contact with the p<br>absorption through the skin.<br>erious damage to eyes/eye irritation :<br>Mild eye irritation<br>spiration hazard :<br>"Inhalation of vapours may cause irritation<br>May cause lung damage if swallowed<br>onograph(s) from the IARC (Internation                                                                                                                                                                                               | preparation may cause removal of natural fat from the skin resulting in non allergic contact dermatitis a<br>on of the respiratory system in very susceptible persons."<br>nal Agency for Research on Cancer) :                                                                                                                                                                                                                  |
| kin corrosion/skin irritation :<br>Repeated or prolonged contact with the p<br>absorption through the skin.<br>erious damage to eyes/eye irritation :<br>Mild eye irritation<br>spiration hazard :<br>"Inhalation of vapours may cause irritation<br>May cause lung damage if swallowed<br>conograph(s) from the IARC (Internation<br>CAS 80-62-6 : IARC Group 3 : The agen                                                                                                                                                     | preparation may cause removal of natural fat from the skin resulting in non allergic contact dermatitis a<br>on of the respiratory system in very susceptible persons."<br><b>nal Agency for Research on Cancer) :</b><br>It is not classifiable as to its carcinogenicity to humans.                                                                                                                                            |
| kin corrosion/skin irritation :<br>Repeated or prolonged contact with the pabsorption through the skin.<br>erious damage to eyes/eye irritation :<br>Mild eye irritation<br>spiration hazard :<br>"Inhalation of vapours may cause irritation<br>May cause lung damage if swallowed<br>lonograph(s) from the IARC (Internation<br>CAS 80-62-6 : IARC Group 3 : The agen<br>CTION 12 : ECOLOGICAL INFORM/<br>The product must not be allowed to run in                                                                           | preparation may cause removal of natural fat from the skin resulting in non allergic contact dermatitis a<br>on of the respiratory system in very susceptible persons."<br><b>nal Agency for Research on Cancer) :</b><br>It is not classifiable as to its carcinogenicity to humans.                                                                                                                                            |
| kin corrosion/skin irritation :<br>Repeated or prolonged contact with the p<br>absorption through the skin.<br>erious damage to eyes/eye irritation :<br>Mild eye irritation<br>spiration hazard :<br>"Inhalation of vapours may cause irritation<br>May cause lung damage if swallowed<br>conograph(s) from the IARC (Internation<br>CAS 80-62-6 : IARC Group 3 : The agen                                                                                                                                                     | preparation may cause removal of natural fat from the skin resulting in non allergic contact dermatitis a<br>on of the respiratory system in very susceptible persons."<br><b>nal Agency for Research on Cancer) :</b><br>It is not classifiable as to its carcinogenicity to humans.                                                                                                                                            |
| kin corrosion/skin irritation :<br>Repeated or prolonged contact with the p<br>absorption through the skin.<br>erious damage to eyes/eye irritation :<br>Mild eye irritation<br>spiration hazard :<br>"Inhalation of vapours may cause irritation<br>May cause lung damage if swallowed<br>ionograph(s) from the IARC (Internation<br>CAS 80-62-6 : IARC Group 3 : The agen<br>CTION 12 : ECOLOGICAL INFORM/<br>The product must not be allowed to run in<br>2.1. Toxicity<br>2.1.1. Substances                                 | preparation may cause removal of natural fat from the skin resulting in non allergic contact dermatitis a<br>on of the respiratory system in very susceptible persons."<br><b>nal Agency for Research on Cancer) :</b><br>It is not classifiable as to its carcinogenicity to humans.<br><b>ATION</b>                                                                                                                            |
| kin corrosion/skin irritation :<br>Repeated or prolonged contact with the p<br>absorption through the skin.<br>erious damage to eyes/eye irritation :<br>Mild eye irritation<br>spiration hazard :<br>"Inhalation of vapours may cause irritation<br>May cause lung damage if swallowed<br>ionograph(s) from the IARC (Internation<br>CAS 80-62-6 : IARC Group 3 : The agen<br>CTION 12 : ECOLOGICAL INFORM/<br>The product must not be allowed to run in<br>2.1. Toxicity<br>2.1.1. Substances                                 | preparation may cause removal of natural fat from the skin resulting in non allergic contact dermatitis a<br>on of the respiratory system in very susceptible persons."<br><b>nal Agency for Research on Cancer) :</b><br>It is not classifiable as to its carcinogenicity to humans.<br><b>ATION</b><br>nto drains or waterways.<br>2-OCTADECENYLSUCCINATE (CAS: 93882-40-7)<br>LC50 > 100 mg/l                                 |
| kin corrosion/skin irritation :<br>Repeated or prolonged contact with the probasorption through the skin.<br>erious damage to eyes/eye irritation :<br>Mild eye irritation<br>spiration hazard :<br>"Inhalation of vapours may cause irritation<br>May cause lung damage if swallowed<br>conograph(s) from the IARC (Internation<br>CAS 80-62-6 : IARC Group 3 : The agen<br>CTION 12 : ECOLOGICAL INFORM<br>The product must not be allowed to run in<br>2.1. Toxicity<br>2.1.1. Substances<br>4,4'-THIODIETHYLENE HYDROGEN -2 | preparation may cause removal of natural fat from the skin resulting in non allergic contact dermatitis a<br>on of the respiratory system in very susceptible persons."<br><b>nal Agency for Research on Cancer) :</b><br>It is not classifiable as to its carcinogenicity to humans.<br><b>ATION</b><br>Into drains or waterways.<br>2-OCTADECENYLSUCCINATE (CAS: 93882-40-7)<br>LC50 > 100 mg/l<br>Duration of exposure : 96 h |
| kin corrosion/skin irritation :<br>Repeated or prolonged contact with the probasorption through the skin.<br>erious damage to eyes/eye irritation :<br>Mild eye irritation<br>spiration hazard :<br>"Inhalation of vapours may cause irritation<br>May cause lung damage if swallowed<br>conograph(s) from the IARC (Internation<br>CAS 80-62-6 : IARC Group 3 : The agen<br>CTION 12 : ECOLOGICAL INFORM<br>The product must not be allowed to run in<br>2.1. Toxicity<br>2.1.1. Substances<br>4,4'-THIODIETHYLENE HYDROGEN -2 | preparation may cause removal of natural fat from the skin resulting in non allergic contact dermatitis a<br>on of the respiratory system in very susceptible persons."<br><b>nal Agency for Research on Cancer) :</b><br>It is not classifiable as to its carcinogenicity to humans.<br><b>ATION</b><br>nto drains or waterways.<br>2-OCTADECENYLSUCCINATE (CAS: 93882-40-7)<br>LC50 > 100 mg/l                                 |

| Daphnia magna<br>of exposure : 48 h<br>gne directrice 202 (Daphnia sp., essai d'immobilisation immédiate)<br>100 mg/l<br>Pseudokirchnerella subcapitata<br>of exposure : 72 h<br>gne directrice 201 (Algues, Essai d'inhibition de la croissance)<br>FUTED PHOSPHORUS COMPOUND<br>.5 mg/l<br>Oncorhynchus mykiss<br>of exposure : 96 h<br>gne directrice 203 (Poisson, essai de toxicité aiguë)<br>.09 mg/l<br>= 10<br>Daphnia magna<br>of exposure : 48 h<br>gne directrice 202 (Daphnia sp., essai d'immobilisation immédiate)<br>0.14 mg/l<br>Daphnia sp.<br>of exposure : 21 jours<br>0.31 mg/l<br>= 1<br>Pseudokirchnerella subcapitata<br>of exposure : 72 h<br><= 10 mg/l<br><= 10 mg/l |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| of exposure : 48 h<br>gne directrice 202 (Daphnia sp., essai d'immobilisation immédiate)<br>100 mg/l<br>Pseudokirchnerella subcapitata<br>of exposure : 72 h<br>gne directrice 201 (Algues, Essai d'inhibition de la croissance)<br>TUTED PHOSPHORUS COMPOUND<br>55 mg/l<br>Oncorhynchus mykiss<br>of exposure : 96 h<br>gne directrice 203 (Poisson, essai de toxicité aiguë)<br>.09 mg/l<br>= 10<br>Daphnia magna<br>of exposure : 48 h<br>gne directrice 202 (Daphnia sp., essai d'immobilisation immédiate)<br>0.14 mg/l<br>Daphnia sp.<br>of exposure : 21 jours<br>0.31 mg/l<br>= 1<br>Pseudokirchnerella subcapitata<br>of exposure : 72 h<br><= 10 mg/l<br><= 10 mg/l                  |
| 100 mg/l<br>Pseudokirchnerella subcapitata<br>of exposure : 72 h<br>gne directrice 201 (Algues, Essai d'inhibition de la croissance)<br>TUTED PHOSPHORUS COMPOUND<br>.5 mg/l<br>Oncorhynchus mykiss<br>of exposure : 96 h<br>gne directrice 203 (Poisson, essai de toxicité aiguë)<br>.09 mg/l<br>= 10<br>Daphnia magna<br>of exposure : 48 h<br>gne directrice 202 (Daphnia sp., essai d'immobilisation immédiate)<br>0.14 mg/l<br>Daphnia sp.<br>of exposure : 21 jours<br>0.31 mg/l<br>= 1<br>Pseudokirchnerella subcapitata<br>of exposure : 72 h<br><= 10 mg/l                                                                                                                            |
| Pseudokirchnerella subcapitata<br>of exposure : 72 h<br>gne directrice 201 (Algues, Essai d'inhibition de la croissance)<br>TUTED PHOSPHORUS COMPOUND<br>.5 mg/l<br>Oncorhynchus mykiss<br>of exposure : 96 h<br>gne directrice 203 (Poisson, essai de toxicité aiguë)<br>.09 mg/l<br>= 10<br>Daphnia magna<br>of exposure : 48 h<br>gne directrice 202 (Daphnia sp., essai d'immobilisation immédiate)<br>0.14 mg/l<br>Daphnia sp.<br>of exposure : 21 jours<br>0.31 mg/l<br>= 1<br>Pseudokirchnerella subcapitata<br>of exposure : 72 h<br><= 10 mg/l                                                                                                                                        |
| of exposure : 72 h<br>gne directrice 201 (Algues, Essai d'inhibition de la croissance)<br>TUTED PHOSPHORUS COMPOUND<br>.5 mg/l<br>Oncorhynchus mykiss<br>of exposure : 96 h<br>gne directrice 203 (Poisson, essai de toxicité aiguë)<br>.09 mg/l<br>= 10<br>Daphnia magna<br>of exposure : 48 h<br>gne directrice 202 (Daphnia sp., essai d'immobilisation immédiate)<br>0.14 mg/l<br>Daphnia sp.<br>of exposure : 21 jours<br>0.31 mg/l<br>= 1<br>Pseudokirchnerella subcapitata<br>of exposure : 72 h<br><= 10 mg/l                                                                                                                                                                          |
| gne directrice 201 (Algues, Essai d'inhibition de la croissance)<br>TUTED PHOSPHORUS COMPOUND<br>.5 mg/l<br>Oncorhynchus mykiss<br>of exposure : 96 h<br>gne directrice 203 (Poisson, essai de toxicité aiguë)<br>.09 mg/l<br>= 10<br>Daphnia magna<br>of exposure : 48 h<br>gne directrice 202 (Daphnia sp., essai d'immobilisation immédiate)<br>0.14 mg/l<br>Daphnia sp.<br>of exposure : 21 jours<br>0.31 mg/l<br>= 1<br>Pseudokirchnerella subcapitata<br>of exposure : 72 h<br><= 10 mg/l                                                                                                                                                                                                |
| TUTED PHOSPHORUS COMPOUND<br>.5 mg/l<br>Oncorhynchus mykiss<br>of exposure : 96 h<br>gne directrice 203 (Poisson, essai de toxicité aiguë)<br>.09 mg/l<br>= 10<br>Daphnia magna<br>of exposure : 48 h<br>gne directrice 202 (Daphnia sp., essai d'immobilisation immédiate)<br>0.14 mg/l<br>Daphnia sp.<br>of exposure : 21 jours<br>0.31 mg/l<br>= 1<br>Pseudokirchnerella subcapitata<br>of exposure : 72 h<br><= 10 mg/l                                                                                                                                                                                                                                                                    |
| <ul> <li>5 mg/l<br/>Oncorhynchus mykiss<br/>of exposure : 96 h<br/>gne directrice 203 (Poisson, essai de toxicité aiguë)</li> <li>.09 mg/l<br/>= 10<br/>Daphnia magna<br/>of exposure : 48 h<br/>gne directrice 202 (Daphnia sp., essai d'immobilisation immédiate)</li> <li>0.14 mg/l<br/>Daphnia sp.<br/>of exposure : 21 jours</li> <li>0.31 mg/l<br/>= 1<br/>Pseudokirchnerella subcapitata<br/>of exposure : 72 h</li> <li>&lt;= 10 mg/l</li> <li>&lt;= 10 mg/l</li> </ul>                                                                                                                                                                                                                |
| Oncorhynchus mykiss<br>of exposure : 96 h<br>gne directrice 203 (Poisson, essai de toxicité aiguë)<br>.09 mg/l<br>= 10<br>Daphnia magna<br>of exposure : 48 h<br>gne directrice 202 (Daphnia sp., essai d'immobilisation immédiate)<br>0.14 mg/l<br>Daphnia sp.<br>of exposure : 21 jours<br>0.31 mg/l<br>= 1<br>Pseudokirchnerella subcapitata<br>of exposure : 72 h<br><= 10 mg/l<br><= 10 mg/l                                                                                                                                                                                                                                                                                              |
| of exposure : 96 h<br>gne directrice 203 (Poisson, essai de toxicité aiguë)<br>1.09 mg/l<br>= 10<br>Daphnia magna<br>of exposure : 48 h<br>gne directrice 202 (Daphnia sp., essai d'immobilisation immédiate)<br>0.14 mg/l<br>Daphnia sp.<br>of exposure : 21 jours<br>0.31 mg/l<br>= 1<br>Pseudokirchnerella subcapitata<br>of exposure : 72 h<br><= 10 mg/l<br><= 10 mg/l                                                                                                                                                                                                                                                                                                                    |
| gne directrice 203 (Poisson, essai de toxicité aiguë)<br>1.09 mg/l<br>= 10<br>Daphnia magna<br>of exposure : 48 h<br>gne directrice 202 (Daphnia sp., essai d'immobilisation immédiate)<br>0.14 mg/l<br>Daphnia sp.<br>of exposure : 21 jours<br>0.31 mg/l<br>= 1<br>Pseudokirchnerella subcapitata<br>of exposure : 72 h<br><= 10 mg/l<br><= 10 mg/l                                                                                                                                                                                                                                                                                                                                          |
| <ul> <li>.09 mg/l</li> <li>= 10</li> <li>Daphnia magna<br/>of exposure : 48 h</li> <li>gne directrice 202 (Daphnia sp., essai d'immobilisation immédiate)</li> <li>0.14 mg/l</li> <li>Daphnia sp.</li> <li>of exposure : 21 jours</li> <li>0.31 mg/l</li> <li>= 1</li> <li>Pseudokirchnerella subcapitata<br/>of exposure : 72 h</li> <li>&lt;= 10 mg/l</li> <li>&lt;= 10 mg/l</li> </ul>                                                                                                                                                                                                                                                                                                      |
| <ul> <li>= 10</li> <li>Daphnia magna<br/>of exposure : 48 h<br/>gne directrice 202 (Daphnia sp., essai d'immobilisation immédiate)</li> <li>0.14 mg/l</li> <li>Daphnia sp.<br/>of exposure : 21 jours</li> <li>0.31 mg/l</li> <li>= 1</li> <li>Pseudokirchnerella subcapitata<br/>of exposure : 72 h</li> <li>&lt;= 10 mg/l</li> <li>&lt;= 10 mg/l</li> </ul>                                                                                                                                                                                                                                                                                                                                  |
| Daphnia magna<br>of exposure : 48 h<br>gne directrice 202 (Daphnia sp., essai d'immobilisation immédiate)<br>0.14 mg/l<br>Daphnia sp.<br>of exposure : 21 jours<br>0.31 mg/l<br>= 1<br>Pseudokirchnerella subcapitata<br>of exposure : 72 h<br><= 10 mg/l<br><= 10 mg/l                                                                                                                                                                                                                                                                                                                                                                                                                        |
| of exposure : 48 h<br>gne directrice 202 (Daphnia sp., essai d'immobilisation immédiate)<br>0.14 mg/l<br>Daphnia sp.<br>of exposure : 21 jours<br>0.31 mg/l<br>= 1<br>Pseudokirchnerella subcapitata<br>of exposure : 72 h<br><= 10 mg/l<br><= 10 mg/l                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| gne directrice 202 (Daphnia sp., essai d'immobilisation immédiate)<br>0.14 mg/l<br>Daphnia sp.<br>of exposure : 21 jours<br>0.31 mg/l<br>= 1<br>Pseudokirchnerella subcapitata<br>of exposure : 72 h<br><= 10 mg/l<br><= 10 mg/l                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 0.14 mg/l<br>Daphnia sp.<br>of exposure : 21 jours<br>0.31 mg/l<br>= 1<br>Pseudokirchnerella subcapitata<br>of exposure : 72 h<br><= 10 mg/l<br><= 10 mg/l                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Daphnia sp.<br>of exposure : 21 jours<br>0.31 mg/l<br>= 1<br>Pseudokirchnerella subcapitata<br>of exposure : 72 h<br><= 10 mg/l                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| of exposure : 21 jours<br>0.31 mg/l<br>= 1<br>Pseudokirchnerella subcapitata<br>of exposure : 72 h<br><= 10 mg/l<br><= 10 mg/l                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 0.31 mg/l<br>= 1<br>Pseudokirchnerella subcapitata<br>of exposure : 72 h<br><= 10 mg/l                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| = 1<br>Pseudokirchnerella subcapitata<br>of exposure : 72 h<br><= 10 mg/l<br><= 10 mg/l                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Pseudokirchnerella subcapitata<br>of exposure : 72 h<br><= 10 mg/l<br><= 10 mg/l                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| of exposure : 72 h<br><= 10 mg/l<br><= 10 mg/l                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <= 10 mg/l<br><= 10 mg/l                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <= 10 mg/l                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <= 10 mg/l                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 0 <= 10 mg/l                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| VEC LA TÉTRA-ÉTHYLÈNEPENTAMINE (CAS: 68784-17-8)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 000 mg/l                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Pimephales promelas                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| of exposure : 96 h                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| gne directrice 203 (Poisson, essai de toxicité aiguë)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 000 mg/l                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Daphnia magna                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| of exposure : 48 h                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| gne directrice 202 (Daphnia sp., essai d'immobilisation immédiate)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 94 mg/l                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Pseudokirchnerella subcapitata                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| of exposure : 96 h                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| gne directrice 201 (Algues, Essai d'inhibition de la croissance)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| NEUTRAL OIL-BASED (CAS: 72623-87-1)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 00 mg/l                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| of exposure : 96 h<br>gne directrice 203 (Poisson, essai de toxicité aiguë)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| = 1000 mg/l                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| - 1000 mg/l<br>Oncorhynchus mykiss                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| : 1000 mg/l<br>Oncorhynchus mykiss<br>of exposure : 14 jours                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Oncorhynchus mykiss                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

OCDE Ligne directrice 202 (Daphnia sp., essai d'immobilisation immédiate)

NOEC = 10 mg/l Species : Daphnia magna Duration of exposure : 21 jours

Algae toxicity :

ECr50 > 100 mg/l Duration of exposure : 72 h OCDE Ligne directrice 201 (Algues, Essai d'inhibition de la croissance)

## 12.1.2. Mixtures

| 12.1.2. Mixtures                                                                 |                                                                                                                                        |
|----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| Fish toxicity :                                                                  | No observed effect.<br>LC50 > 100 mg/l<br>NOEC > 1 mg/l                                                                                |
| Crustacean toxicity :                                                            | No observed effect.                                                                                                                    |
| Algae toxicity :                                                                 | No observed effect.<br>LC50 <= 1 mg/l                                                                                                  |
| Aquatic plant toxicity :<br>12.2. Persistence and degradability                  |                                                                                                                                        |
| 12.2.1. Substances                                                               |                                                                                                                                        |
| 4,4'-THIODIETHYLENE HYDROGEN -2-OCTAD<br>Biodegradability :                      | ECENYLSUCCINATE (CAS: 93882-40-7)<br>Non-rapidly degradable.                                                                           |
| REACTION PRODUCT OF ALKYLTHIOALCOHO<br>Biodegradability :                        | DL AND SUBSTITUTED PHOSPHORUS COMPOUND<br>no degradability data is available, the substance is considered as not<br>degrading quickly. |
| MINERAL OIL (CAS: 64742-79-6)                                                    |                                                                                                                                        |
| Biodegradability :                                                               | no degradability data is available, the substance is considered as not degrading quickly.                                              |
| ACIDE ISO-OCTANDECANOÏQUE, PRODUITS<br>Biodegradability :                        | DE REACTION AVEC LA TÉTRA-ÉTHYLÈNEPENTAMINE (CAS: 68784-17-8)<br>Non-rapidly degradable.                                               |
| LUBRICATING OILS (PETROLEUM), C20-50, H<br>Biodegradability :                    | YDROTREATED NEUTRAL OIL-BASED (CAS: 72623-87-1)<br>Non-rapidly degradable.                                                             |
| 12.2.2. Mixtures                                                                 |                                                                                                                                        |
|                                                                                  | no degradability data is available, the substance is considered as not                                                                 |
| Biodegradability :                                                               | degrading quickly.                                                                                                                     |
| 12.3. Bioaccumulative potential                                                  |                                                                                                                                        |
| 12.3.1. Substances                                                               |                                                                                                                                        |
| 4,4'-THIODIETHYLENE HYDROGEN -2-OCTAD                                            |                                                                                                                                        |
| Bioaccumulation :                                                                | 100 <= BCF < 500.<br>OCDE Ligne directrice 305 (Bioconcentration: Essai dynamique chez le poisson)                                     |
| LUBRICATING OILS (PETROLEUM), C20-50, H<br>Octanol/water partition coefficient : | YDROTREATED NEUTRAL OIL-BASED (CAS: 72623-87-1)<br>log Koe > 6                                                                         |
| 12.4. Mobility in soil                                                           |                                                                                                                                        |
| No data available.                                                               |                                                                                                                                        |
| 12.5. Results of PBT and vPvB assessment                                         |                                                                                                                                        |
| No data available.                                                               |                                                                                                                                        |
| 12.6. Other adverse effects                                                      |                                                                                                                                        |
| Do not dispose of the product in the natural enviro                              | nment, effluents or surface waters.                                                                                                    |

# **SECTION 13 : DISPOSAL CONSIDERATIONS**

The appropriate waste management of the mixture and/or its container must be determined in accordance with local regulations.

### 13.1. Waste treatment methods

Do not pour into drains or waterways.

#### Waste :

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

## Soiled packaging :

Empty container completely. Keep label(s) on container. Give to a certified disposal contractor.

### **SECTION 14 : TRANSPORT INFORMATION**

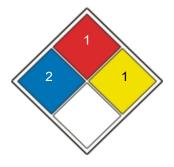
Exempt from transport classification and labelling.

- 14.1. UN number
- -
- 14.2. UN proper shipping name
- 14.3. Transport hazard class(es)
- -
- 14.4. Packing group
- 14.5. Environmental hazards
- 14.6. Special precautions for user

### **SECTION 15 : REGULATORY INFORMATION**

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

- The following regulations have been used:
- OSHA Hazard Communication Standard 29 CFR 1910.1200
- Container information:
  - No data available.
- Particular provisions :
- No data available.
- Standardised American system for the identification of hazards presented by the product in view of emergency procedures (NFPA 704) : NFPA 704, Labelling: Health=2 Inflammability=1 Instability/Reactivity=1 Specific Risk=none



- Clean Water Act : Toxic Pollutants (CWA 307A) Unlisted.
- Clean Water Act : Hazardous Substances (CWA 311) Unlisted.
- Clean Water Act : Hazardous Substances (CWA 304b) Unlisted.
- Clean Water Act : Priority Pollutants (CWA Priority) Unlisted.

| MULTI DCTF - 45611northame            |                                                                                                |
|---------------------------------------|------------------------------------------------------------------------------------------------|
| - Clean Air Act : Hazardous A         | Air Pollutants (CAA 112(b) HAP (188))                                                          |
| CAS                                   | Name                                                                                           |
| 80-62-6                               | METHYL METHACRYLATE                                                                            |
| - Clean Air Act : Organic Haz         | ardous Air Pollutants National Emission Standards (CAA 112(b) HON (387))                       |
| CAS                                   | Name                                                                                           |
| 80-62-6                               | METHYL METHACRYLATE                                                                            |
|                                       | f Stratospheric Ozone (CAA 602)                                                                |
| Unlisted.                             |                                                                                                |
| - SARA 110                            |                                                                                                |
| CAS                                   | Name                                                                                           |
| 80-62-6                               | METHYL METHACRYLATE                                                                            |
| - SARA 302/304                        |                                                                                                |
| Unlisted.                             |                                                                                                |
| - SARA 313                            |                                                                                                |
| CAS                                   | Name                                                                                           |
| 80-62-6                               | METHYL METHACRYLATE                                                                            |
|                                       | Chemicals known to the state to cause cancer or reproductive toxicity                          |
| Unlisted.                             | memicals known to the state to cause cancer or reproductive toxicity                           |
|                                       |                                                                                                |
| - Massachusetts : Right to Kn<br>CAS  |                                                                                                |
| CAS<br>80-62-6                        |                                                                                                |
|                                       | METHYL METHACRYLATE                                                                            |
| - New Jersey : Right to Know          |                                                                                                |
| CAS                                   |                                                                                                |
| 80-62-6                               | METHYL METHACRYLATE                                                                            |
| - Pennsylvania : Hazardous S          |                                                                                                |
| CAS                                   |                                                                                                |
| 80-62-6                               |                                                                                                |
| - Rhode Island : Hazardous su         |                                                                                                |
| CAS                                   | Name                                                                                           |
| 80-62-6                               | METHYL METHACRYLATE                                                                            |
| - TSCA (Toxic Substances Co           | ontrol Act) - USA                                                                              |
| CAS                                   | Name                                                                                           |
| 93882-40-7                            | 4,4'-THIODIETHYLENE HYDROGEN -2-OCTADECENYLSUCCINATE                                           |
| 80-62-6                               |                                                                                                |
| 72623-87-1                            | LUBRICATING OILS (PETROLEUM), C20-50, HYDROTREATED NEUTRAL OIL-BASED                           |
| 72623-87-1                            | LUBRICATING OILS (PETROLEUM), C20-50, HYDROTREATED NEUTRAL OIL-BASED                           |
| 68784-17-8<br>64742-79-6              | ACIDE ISO-OCTANDECANOÏQUE, PRODUITS DE REACTION AVEC LA TÉTRA-ÉTHYLÈNEPENTAMINE<br>MINERAL OIL |
| 64742-79-6<br>64742-54-7              | MINERAL OIL<br>DISTILLATES (PETROLEUM), HYDROTREATED HEAVY PARAFEINIC                          |
| 64742-54-7<br>36878-20-3 BIS(NONYLPHE | DISTILLATES (PETROLEUM), HYDROTREATED HEAVY PARAFFINIC                                         |
|                                       |                                                                                                |
| 15.2. Chemical safety assess          | ment                                                                                           |
| No data available.                    |                                                                                                |

No data available.

# **SECTION 16 : OTHER INFORMATION**

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions. It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations. The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

### Wording of the phrases mentioned in section 3 :

| H304 | May be fatal if swallowed and enters airways. |
|------|-----------------------------------------------|
| H312 | Harmful in contact with skin.                 |
| H314 | Causes severe skin burns and eye damage.      |
| H315 | Causes skin irritation.                       |
| H317 | May cause an allergic skin reaction.          |
| H320 | Causes eye irritation.                        |
| H332 | Harmful if inhaled.                           |

Abbreviations :

DNEL : Derived No-Effect Level

PNEC : Predicted No-Effect Concentration

ADR : European agreement concerning the international carriage of dangerous goods by Road.

IMDG : International Maritime Dangerous Goods.

IATA : International Air Transport Association.

ICAO : International Civil Aviation Organisation

RID : Regulations concerning the International carriage of Dangerous goods by rail.

GHS07 : Exclamation mark

PBT: Persistent, bioaccumulable and toxic.

vPvB : Very persistent, very bioaccumulable.

HCS : Hazard Communication standard (OSHA).