**G40 COLMATEUR DE MICRO FUITES - 870117**

# SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 2020/878)

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

### 1.1. Product identifier

Product name : G40 COLMATEUR DE MICRO FUITES

Product code : 870117.

UFI : XJ53-Q272-Q60T-QUU1

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

Sealing liquid for heater leaks

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

Registered company name : GEB.

Address : CS 62062.95972.ROISSY CDG CEDEX . France.

Telephone : 01 48 17 99 99. Fax : 01 48 17 98 00.

geb@geb.fr

www.geb.fr

### 1.4. Emergency telephone number : 01 45 42 59 59.

Association/Organisation : INRS.

## SECTION 2 : HAZARDS IDENTIFICATION

### 2.1. Classification of the substance or mixture

**In compliance with EC regulation No. 1272/2008 and its amendments.**

Skin sensitisation, Category 1 (Skin Sens. 1, H317).

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

This mixture does not present an environmental hazard. No known or foreseeable environmental damage under standard conditions of use.

### 2.2. Label elements

**In compliance with EC regulation No. 1272/2008 and its amendments.**

Hazard pictograms :

GHS07

Signal Word :

WARNING

Product identifiers :

| | |
|---|---|
| 613-088-00-6 | 1,2-BENZISOTHIAZOL-3(2H)-ONE |
| 613-326-00-9 | 2-METHYLISOTHIAZOL-3(2H)-ONE |

Hazard statements :

| | |
|---|---|
| H317 | May cause an allergic skin reaction. |

Precautionary statements - General :

| | |
|---|---|
| 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/hearing protection/ ... |

Precautionary statements - Response :

P302 + P352 IF ON SKIN: Wash with plenty of water/...

Precautionary statements - Disposal :

P501 Discard content/container according to applicable regulations.

**|> 2.3. Other hazards**

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC) >= 0.1% published by the European CHemicals Agency (ECHA) under article 57 of REACH: http://echa.europa.eu/fr/candidate-list-table

The mixture fulfils neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006.

The mixture does not contains substances> = 0.1% with endocrine disrupting properties in accordance with the criteria of the Delegated Regulation (EU) 2017/2100 of the Commission or Regulation (EU) 2018/605 of the Commission.

## |>SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2. Mixtures

**Composition :**

| Identification | (EC) 1272/2008 | Note | % |
|---|---|---|---|
| INDEX: 603_002_00_5<br>CAS: 64-17-5<br>EC: 200-578-6<br>REACH: 01-2119457610-43<br><br>ETHANOL | GHS07, GHS02<br>Dgr<br>Flam. Liq. 2, H225<br>Eye Irrit. 2, H319 | [1] | 2.5 <= x % < 10 |
| INDEX: 29456<br>CAS: 7782-42-5<br>EC: 231-955-3<br>REACH: 01-2119486977-12-0018<br><br>GRAPHITE | | [1] | 2.5 <= x % < 10 |
| INDEX: 606-002-00-3<br>CAS: 78-93-3<br>EC: 201-159-0<br>REACH: 01-2119457290-43<br><br>BUTANONE | GHS02, GHS07<br>Dgr<br>Flam. Liq. 2, H225<br>Eye Irrit. 2, H319<br>STOT SE 3, H336<br>EUH:066 | [1] | 0 <= x % < 2.5 |
| INDEX: 613-088-00-6<br>CAS: 2634-33-5<br>EC: 220-120-9<br><br>1,2-BENZISOTHIAZOL-3(2H)-ONE | GHS05, GHS07, GHS09<br>Dgr<br>Acute Tox. 4, H302<br>Skin Irrit. 2, H315<br>Eye Dam. 1, H318<br>Skin Sens. 1, H317<br>Aquatic Acute 1, H400<br>M Acute = 1 | [1] | 0 <= x % < 2.5 |
| INDEX: 613-326-00-9<br>CAS: 2682-20-4<br>EC: 220-239-6<br><br>2-METHYLISOTHIAZOL-3(2H)-ONE | GHS06, GHS05, GHS09<br>Dgr<br>Acute Tox. 3, H301<br>Acute Tox. 3, H311<br>Skin Corr. 1B, H314<br>Skin Sens. 1A, H317<br>Eye Dam. 1, H318<br>Acute Tox. 2, H330<br>Aquatic Acute 1, H400<br>M Acute = 10<br>Aquatic Chronic 1, H410<br>M Chronic = 1<br>EUH:071 | [1] | 0 <= x % < 2.5 |

| | | | |
|---|---|---|---|
| INDEX: 603-117-00-0<br>CAS: 67-63-0<br>EC: 200-661-7<br>REACH: 01-2119457558-25<br><br>PROPAN-2-OL | GHS02, GHS07<br>Dgr<br>Flam. Liq. 2, H225<br>Eye Irrit. 2, H319<br>STOT SE 3, H336 | [1] | 0 <= x % < 2.5 |

**|> Specific concentration limits:**

| Identification | Specific concentration limits | ATE |
|---|---|---|
| INDEX: 603_002_00_5<br>CAS: 64-17-5<br>EC: 200-578-6<br>REACH: 01-2119457610-43<br><br>ETHANOL | | inhalation: ATE = 51 mg/l 4h<br>(vapours)<br>oral: ATE = 10470 mg/kg BW |
| INDEX: 613-088-00-6<br>CAS: 2634-33-5<br>EC: 220-120-9<br><br>1,2-BENZISOTHIAZOL-3(2H)-ONE | Skin Sens. 1: H317 C>= 0.05% | |
| INDEX: 613-326-00-9<br>CAS: 2682-20-4<br>EC: 220-239-6<br><br>2-METHYLISOTHIAZOL-3(2H)-ONE | Skin Sens. 1A: H317 C>= 0.0015% | |

**Information on ingredients :**

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

[1] Substance for which maximum workplace exposure limits are available.

## 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 splashes or contact with eyes :**

Wash thoroughly with fresh, clean water for 15 minutes holding the eyelids open.

**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.

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

**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.

Keep the person exposed at rest. Do not force vomiting.

Seek medical attention immediately, showing the label.

If swallowed accidentally, call a doctor to ascertain whether observation and hospital care will be necessary. Show 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**

In the event of a fire, use :

- sprayed water or water mist
- foam
- multipurpose ABC powder
- BC powder
- carbon dioxide (CO2)
- water with AFFF (Aqueous Film Forming Foam) additive
- halon

**Unsuitable methods of extinction**

In the event of a fire, do not use :

- 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

Due to the toxicity of the gas emitted on thermal decomposition of the products, fire-fighting personnel are to be equipped with autonomous insulating breathing apparatus.

## SECTION 6 : ACCIDENTAL RELEASE MEASURES

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

Consult the safety measures listed under headings 7 and 8.

**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.

Ensure that there is adequate ventilation, especially in confined areas.

**Fire prevention :**

Handle in well-ventilated areas.

Prevent access by unauthorised personnel.

**Recommended equipment and procedures :**

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

Packages which have been opened must be reclosed carefully and stored in an upright position.

**Prohibited equipment and procedures :**

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

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

No data available.

**Storage**

Keep out of reach of children.

Keep the container tightly closed in a dry, well-ventilated place.

The floor must be impermeable and form a collecting basin so that, in the event of an accidental spillage, the liquid cannot spread beyond this area.

**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**

**Occupational exposure limits :**

- European Union (2019/1831, 2017/2398, 2017/164, 2009/161, 2006/15/CE, 2000/39/CE, 98/24/CE) :

| CAS | VME-mg/m3 : | VME-ppm : | VLE-mg/m3 : | VLE-ppm : | Notes : |
|---|---|---|---|---|---|
| 78-93-3 | 600 | 200 | 900 | 300 | - |

- ACGIH TLV (American Conference of Governmental Industrial Hygienists, Threshold Limit Values, 2010) :

| CAS | TWA : | STEL : | Ceiling : | Definition : | Criteria : |
|---|---|---|---|---|---|
| 64-17-5 | | 1000 ppm | | A3 | |
| 7782-42-5 | 2 (R) mg/m3 | | | | |
| 78-93-3 | 200 ppm | 300 ppm | | BEI | |
| 67-63-0 | 200 ppm | 400 ppm | | A4; BEI | |

- Germany - AGW (BAuA - TRGS 900, 08/08/2019) :

| CAS | VME : | VME : | Excess | Notes |
|---|---|---|---|---|
| 64-17-5 | | 200 ppm<br>380 mg/m³ | | 4(II) |
| 78-93-3 | | 200 ppm<br>600 mg/m³ | | 1(I) |
| 67-63-0 | | 200 ppm<br>500 mg/m³ | | 2(II) |

- France (INRS - ED984 / 2020-1546) :

| CAS | VME-ppm : | VME-mg/m3 : | VLE-ppm : | VLE-mg/m3 : | Notes : | TMP No : |
|---|---|---|---|---|---|---|
| 64-17-5 | 1000 | 1900 | 5000 | 9500 | - | 84 |
| 7782-42-5 | - | 2 A | - | - | - | 25 |
| 78-93-3 | 200 | 600 | 300 | 900 | * | 84 |
| 67-63-0 | - | - | 400 | 980 | - | 84 |

- UK / WEL (Workplace exposure limits, EH40/2005, Fourth Edition 2020) :

| CAS | TWA : | STEL : | Ceiling : | Definition : | Criteria : |
|---|---|---|---|---|---|
| 64-17-5 | 1000 ppm<br>1920 mg/m³ | | | | |

| | | | | | |
|---|---|---|---|---|---|
| 78-93-3 | 200 ppm<br>600 mg/m³ | 300 ppm<br>899 mg/m³ | | Sk. BMGV | |
| 67-63-0 | 400 ppm<br>999 mg/m³ | 500 ppm<br>1250 mg/m³ | | | |

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

PROPAN-2-OL (CAS: 67-63-0)

**Final use:** **Workers.**
Exposure method: Dermal contact.
Potential health effects: Long term systemic effects.
DNEL : 888 mg/kg body weight/day

Exposure method: Inhalation.
Potential health effects: Long term systemic effects.
DNEL : 500 mg of substance/m3

**Final use:** **Consumers.**
Exposure method: Ingestion.
Potential health effects: Long term systemic effects.
DNEL : 26 mg/kg body weight/day

Exposure method: Dermal contact.
Potential health effects: Long term systemic effects.
DNEL : 319 mg/kg body weight/day

Exposure method: Inhalation.
Potential health effects: Long term systemic effects.
DNEL : 89 mg of substance/m3

BUTANONE (CAS: 78-93-3)

**Final use:** **Workers.**
Exposure method: Dermal contact.
Potential health effects: Long term systemic effects.
DNEL : 1161 mg/kg body weight/day

Exposure method: Inhalation.
Potential health effects: Long term systemic effects.
DNEL : 600 mg of substance/m3

**Final use:** **Consumers.**
Exposure method: Ingestion.
Potential health effects: Long term systemic effects.
DNEL : 31 mg/kg body weight/day

Exposure method: Dermal contact.
Potential health effects: Long term systemic effects.
DNEL : 412 mg/kg body weight/day

Exposure method: Inhalation.
Potential health effects: Long term systemic effects.
DNEL : 106 mg of substance/m3

ETHANOL (CAS: 64-17-5)

**Final use:** **Workers.**

| | |
|---|---|
| Exposure method: | Dermal contact. |
| Potential health effects: | Long term systemic effects. |
| DNEL : | 343 mg/kg body weight/day |
| Exposure method: | Inhalation. |
| Potential health effects: | Long term systemic effects. |
| DNEL : | 950 mg of substance/m3 |
| Exposure method: | Inhalation. |
| Potential health effects: | Short term local effects. |
| DNEL : | 1900 mg of substance/m3 |

**Final use:** **Consumers.**

| | |
|---|---|
| Exposure method: | Ingestion. |
| Potential health effects: | Long term systemic effects. |
| DNEL : | 87 mg/kg body weight/day |
| Exposure method: | Dermal contact. |
| Potential health effects: | Long term systemic effects. |
| DNEL : | 206 mg/kg body weight/day |
| Exposure method: | Inhalation. |
| Potential health effects: | Long term systemic effects. |
| DNEL : | 114 mg of substance/m3 |

**Predicted no effect concentration (PNEC):**

PROPAN-2-OL (CAS: 67-63-0)

| | |
|---|---|
| Environmental compartment: | Soil. |
| PNEC : | 28 mg/kg |
| Environmental compartment: | Fresh water. |
| PNEC : | 140.9 mg/l |
| Environmental compartment: | Sea water. |
| PNEC : | 140.9 mg/l |
| Environmental compartment: | Intermittent waste water. |
| PNEC : | 140.9 mg/l |
| Environmental compartment: | Fresh water sediment. |
| PNEC : | 552 mg/kg |
| Environmental compartment: | Marine sediment. |
| PNEC : | 552 mg/kg |
| Environmental compartment: | Waste water treatment plant. |
| PNEC : | 2251 mg/l |
| Environmental compartment: | Vermivore predators (oral). |
| PNEC : | 160 mg/kg |

BUTANONE (CAS: 78-93-3)

| | |
|---|---|
| Environmental compartment: | Soil. |

| | |
|---|---|
| PNEC : | 22.5 mg/kg |
| Environmental compartment: | Fresh water. |
| PNEC : | 55.8 mg/l |
| Environmental compartment: | Sea water. |
| PNEC : | 55.8 µg/l |
| Environmental compartment: | Intermittent waste water. |
| PNEC : | 55.8 mg/l |
| Environmental compartment: | Fresh water sediment. |
| PNEC : | 284.7 mg/kg |
| Environmental compartment: | Marine sediment. |
| PNEC : | 284.7 µg/kg |
| Environmental compartment: | Waste water treatment plant. |
| PNEC : | 709 mg/l |
| Environmental compartment: | Vermivore predators (oral). |
| PNEC : | 1000 mg/m3 |

ETHANOL (CAS: 64-17-5)

| | |
|---|---|
| Environmental compartment: | Soil. |
| PNEC : | 0.63 mg/kg |
| Environmental compartment: | Fresh water. |
| PNEC : | 0.96 mg/l |
| Environmental compartment: | Sea water. |
| PNEC : | 0.79 mg/l |
| Environmental compartment: | Intermittent waste water. |
| PNEC : | 2.75 mg/l |
| Environmental compartment: | Fresh water sediment. |
| PNEC : | 3.6 mg/kg |
| Environmental compartment: | Marine sediment. |
| PNEC : | 2.9 mg/kg |
| Environmental compartment: | Waste water treatment plant. |
| PNEC : | 580 mg/l |
| Environmental compartment: | Vermivore predators (oral). |
| PNEC : | 0.72 mg/kg |

**8.2. Exposure controls**

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

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**

Wear suitable protective gloves in the event of prolonged or repeated skin contact.

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN ISO 374-1.

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 :

- Natural latex
- Nitrile rubber (butadiene-acrylonitrile copolymer rubber (NBR))
- PVC (polyvinyl chloride)
- Butyl Rubber (Isobutylene-isoprene copolymer)

|> **- Body protection**

Avoid skin contact.

Wear suitable protective clothing.

Suitable type of protective clothing :

In the event of substantial spatter, wear liquid-tight protective clothing against chemical risks (type 3) in accordance with EN14605/A1 to prevent skin contact.

In the event of a risk of splashing, wear protective clothing against chemical risks (type 6) in accordance with EN13034/A1 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.

## |>SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

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

**Physical state**

| | |
|---|---|
| Physical state : | Fluid liquid. |

|> **Colour**

Unspecified

|> **Odour**

| | |
|---|---|
| Odour threshold : | Not stated. |

|> **Melting point**

| | |
|---|---|
| Melting point/melting range : | Not relevant. |

|> **Freezing point**

| | |
|---|---|
| Freezing point / Freezing range : | Not stated. |

|> **Boiling point or initial boiling point and boiling range**

| | |
|---|---|
| Boiling point/boiling range : | Not relevant. |

|> **Flammability**

| | |
|---|---|
| Flammability (solid, gas) : | Not stated. |

|> **Lower and upper explosion limit**

| | |
|---|---|
| Explosive properties, lower explosivity limit (%) : | Not stated. |
| Explosive properties, upper explosivity limit (%) : | Not stated. |

**Flash point**

| | |
|---|---|
| Flash Point : | 54.00 °C.<br>Incombustible. |

|> **Auto-ignition temperature**

| | |
|---|---|
| Self-ignition temperature : | Not relevant. |

|> **Decomposition temperature**

| | |
|---|---|
| Decomposition point/decomposition range : | Not relevant. |

**pH**

| | |
|---|---|
| pH : | Not relevant. |

|> **Kinematic viscosity**

| | |
|---|---|
| Viscosity : | Not stated. |

|> **Solubility**

| | |
|---|---|
| Water solubility : | Dilutable. |
| Fat solubility : | Not stated. |

|> **Partition coefficient n-octanol/water (log value)**

| | |
|---|---|
| Partition coefficient: n-octanol/water : | Not stated. |

**Vapour pressure**

| | |
|---|---|
| Vapour pressure (50°C) : | Not relevant. |

|> **Density and/or relative density**

| | |
|---|---|
| Density : | = 1 |

|> **Relative vapour density**

| | |
|---|---|
| Vapour density : | Not stated. |

**9.2. Other information**

| | |
|---|---|
| VOC (g/l) : | 0.04 |

|> **9.2.1. Information with regard to physical hazard classes**

No data available.

**Flammable liquids**

N/A

|> **9.2.2. Other safety characteristics**

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**

When exposed to high temperatures, the mixture can release hazardous decomposition products, such as carbon monoxide and dioxide, fumes and nitrogen oxide.

**10.4. Conditions to avoid**

Avoid :

- frost
- accumulation of electrostatic charges.
- heating
- heat
- flames and hot surfaces

**10.5. Incompatible materials**

No data available.

**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 hazard classes as defined in Regulation (EC) No 1272/2008

Splashes in the eyes may cause irritation and reversible damage

May cause an allergic reaction by skin contact.

#### 11.1.1. Substances

**Acute toxicity :**

GRAPHITE (CAS: 7782-42-5)

| | |
|---|---|
| Oral route : | LD50 > 2000 mg/kg<br>Species : Rat<br>OECD Guideline 423 (Acute Oral toxicityAcute Toxic Class Method) |
| Inhalation route (Dusts/mist) : | LC50 > 2000 mg/m3<br>Species : Rat<br>OECD Guideline 403 (Acute Inhalation Toxicity) |

ETHANOL (CAS: 64-17-5)

| | |
|---|---|
| Oral route : | LD50 = 10470 mg/kg<br>OECD Guideline 401 (Acute Oral Toxicity) |
| Dermal route : | LD50 > 2000 mg/kg<br>Species : Rabbit<br>OECD Guideline 402 (Acute Dermal Toxicity) |
| Inhalation route (Vapours) : | LC50 = 51 mg/l<br>Species : Rat<br>OECD Guideline 403 (Acute Inhalation Toxicity)<br>Duration of exposure : 4 h |

**Skin corrosion/skin irritation :**

ETHANOL (CAS: 64-17-5)

Species : Rabbit
OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

Species : Rabbit
OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

**Serious damage to eyes/eye irritation :**

ETHANOL (CAS: 64-17-5)

Species : Rabbit
OECD Guideline 405 (Acute Eye Irritation / Corrosion)

Species : Rabbit
OECD Guideline 405 (Acute Eye Irritation / Corrosion)

Species : Rabbit
OECD Guideline 405 (Acute Eye Irritation / Corrosion)

Species : Rabbit
OECD Guideline 405 (Acute Eye Irritation / Corrosion)

**Respiratory or skin sensitisation :**

ETHANOL (CAS: 64-17-5)

Local lymph node stimulation test : Non-Sensitiser.
Species : Mouse
OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)

Guinea Pig Maximisation Test (GMPT) : Non-sensitiser.
Species : Others

**Germ cell mutagenicity :**

GRAPHITE (CAS: 7782-42-5)

No mutagenic effect.

Mutagenesis (in vitro) : Negative.
Species : Mammalian Cell Line
OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)

ETHANOL (CAS: 64-17-5)

No mutagenic effect.

OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)

**Carcinogenicity :**

GRAPHITE (CAS: 7782-42-5)

Carcinogenicity Test : Negative.
No carcinogenic effect.
Species : Human

**Reproductive toxicant :**

GRAPHITE (CAS: 7782-42-5)

No toxic effect for reproduction

ETHANOL (CAS: 64-17-5)

Study on fertility : Species : Rat
OECD Guideline 414 (Prenatal Developmental Toxicity Study)

**Specific target organ systemic toxicity - repeated exposure :**

ETHANOL (CAS: 64-17-5)

Inhalation route : C > 20 mg/litre/6h/day
Species : Rat
Duration of exposure : 90 days

GRAPHITE (CAS: 7782-42-5)

Species : Rat
OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)

OECD Guideline 412 (Repeated Dose Inhalation Toxicity: 28/14-Day)

**11.1.2. Mixture**

**Acute toxicity :**

Species : Rat
LD50 > 2500 mg/kg
Species : Rat

LD50 > 2000 mg/kg
Species : Rat
LC50 = 5.71 mg/l

**Skin corrosion/skin irritation :**

Effect observed : Overall irritation score
Average score < 1.5
Species : Rabbit
OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

**Germ cell mutagenicity :**

Mutagenesis (in vitro) : Negative.
Species : Bacteria
OECD Guideline 471 (Bacterial Reverse Mutation Assay)

Ames test (in vitro) : Negative.
OCDE 471 (Reverse mutation test bacteria).

**Monograph(s) from the IARC (International Agency for Research on Cancer) :**

CAS 67-63-0 : IARC Group 3 : The agent is not classifiable as to its carcinogenicity to humans.

CAS 64-17-5 : IARC Group 1 : The agent is carcinogenic to humans.

## SECTION 12 : ECOLOGICAL INFORMATION

### 12.1. Toxicity

#### 12.1.1. Substances

GRAPHITE (CAS: 7782-42-5)

Fish toxicity : LC50 > 100 mg/l
Duration of exposure : 96 h
OECD Guideline 203 (Fish, Acute Toxicity Test)

Crustacean toxicity : EC50 > 100 mg/l
Duration of exposure : 48 h
OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)

Algae toxicity : ECr50 > 100 mg/l
Duration of exposure : 72 h
OECD Guideline 201 (Alga, Growth Inhibition Test)

ETHANOL (CAS: 64-17-5)

Fish toxicity : LC50 = 14200 mg/l
Species : Pimephales promelas
Duration of exposure : 96 h

Crustacean toxicity : EC50 = 5012 mg/l
Species : Daphnia magna
Duration of exposure : 48 h

NOEC = 9.6 mg/l
Species : Daphnia magna
Duration of exposure : 14 days

Algae toxicity : ECr50 = 275 mg/l
Duration of exposure : 72 h

EC10 mg/l
Duration of exposure : 72 h

**12.1.2. Mixtures**

No aquatic toxicity data available for the mixture.

**12.2. Persistence and degradability**

**12.2.1. Substances**

GRAPHITE (CAS: 7782-42-5)

Biodegradability : no degradability data is available, the substance is considered as not degrading quickly.

ETHANOL (CAS: 64-17-5)

Biodegradability : no degradability data is available, the substance is considered as not degrading quickly.

**12.3. Bioaccumulative potential**

No data available.

**12.4. Mobility in soil**

No data available.

**12.5. Results of PBT and vPvB assessment**

No data available.

**12.6. Endocrine disrupting properties**

No data available.

**12.7. Other adverse effects**

No data available.

## SECTION 13 : DISPOSAL CONSIDERATIONS

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

**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 or ID 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**

**|> - Classification and labelling information included in section 2:**

The following regulations have been used:

- EU Regulation No. 1272/2008 amended by EU Regulation No. 2021/643 (ATP 16)
- EU Regulation No. 1272/2008 amended by EU Regulation No. 2021/849 (ATP 17)

**- Container information:**

No data available.

**- Particular provisions :**

No data available.

**15.2. Chemical safety assessment**

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 :**

| | |
|---|---|
| H225 | Highly flammable liquid and vapour. |
| H301 | Toxic if swallowed. |
| H302 | Harmful if swallowed. |
| H311 | Toxic in contact with skin. |
| H314 | Causes severe skin burns and eye damage. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| H319 | Causes serious eye irritation. |
| H330 | Fatal if inhaled. |
| H336 | May cause drowsiness or dizziness. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |
| EUH066 | Repeated exposure may cause skin dryness or cracking. |
| EUH071 | Corrosive to the respiratory tract. |

**|> Abbreviations :**

LD50 : The dose of a test substance resulting in 50% lethality in a given time period.

LC50 : The concentration of a test substance resulting in 50% lethality in a given period.

EC50 : The effective concentration of substance that causes 50% of the maximum response.

ECr50 : The effective concentration of substance that causes 50% reduction in growth rate.

NOEC : The concentration with no observed effect.

REACH : Registration, Evaluation, Authorization and Restriction of Chemical Substances.

ATE : Acute Toxicity Estimate

BW : Body Weight

DNEL : Derived No-Effect Level
PNEC : Predicted No-Effect Concentration
UFI : Unique formulation identifier.
STEL : Short-term exposure limit
TWA : Time Weighted Averages
TMP : French Occupational Illness table
TLV : Threshold Limit Value (exposure)
AEV : Average Exposure Value.
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.
WGK : Wassergefahrdungsklasse (Water Hazard Class).
GHS07 : Exclamation mark
PBT: Persistent, bioaccumulable and toxic.
vPvB : Very persistent, very bioaccumulable.
SVHC : Substances of very high concern.
|> Modification compared to the previous version