

# SAFETY DATA SHEET

#### Fluxclene

According to Regulation (EC) No 1907/2006, Annex II, as amended. Commission Regulation (EU) No 2015/830 of 28 May 2015.

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

1.1. Product identifier

Product name Fluxclene

**Product number** FLU-a, EFLU200D, EFLU400DB, ZE

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

Identified uses Cleaning agent.

**Uses advised against**No specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet

Supplier

ELECTROLUBE. A division of HK WENTWORTH LTD

ASHBY PARK, COALFIELD WAY,

ASHBY DE LA ZOUCH, LEICESTERSHIRE LE65 1JR

UNITED KINGDOM +44 (0)1530 419600 +44 (0)1530 416640 info@hkw.co.uk

1.4. Emergency telephone number

Emergency telephone +44 1865 407333

#### SECTION 2: Hazards identification

# 2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Aerosol 1 - H222, H229

Health hazards Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317 STOT SE 3 - H336 Asp. Tox. 1 -

H304

Environmental hazards Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410

2.2. Label elements

**Pictogram** 







Signal word

Danger

#### **Fluxclene**

Hazard statements H222 Extremely flammable aerosol.

H229 Pressurised container: may burst if heated

H315 Causes skin irritation.

H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking.

P211 Do not spray on an open flame or other ignition source.

P251 Do not pierce or burn, even after use.

P261 Avoid breathing spray.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

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

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

P501 Dispose of contents/ container in accordance with national regulations.

Contains Cyclohexane, Propan-2-ol, 1-Methoxy-2-propanol, Hydrocarbons, C7, n-alkanes, isoalkanes,

cyclics

Supplementary precautionary

statements

P264 Wash contaminated skin thoroughly after handling.

P272 Contaminated work clothing should not be allowed out of the workplace.

P273 Avoid release to the environment.

P321 Specific treatment (see medical advice on this label).
P332+P313 If skin irritation occurs: Get medical advice/ attention.
P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.
P337+P313 If eye irritation persists: Get medical advice/ attention.
P362+P364 Take off contaminated clothing and wash it before reuse.

P391 Collect spillage.

# 2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

# SECTION 3: Composition/information on ingredients

## 3.2. Mixtures

Cyclohexane 30-60%

CAS number: 110-82-7 EC number: 203-806-2 REACH registration number: 01-

2119463273-41-XXXX

M factor (Acute) = 1 M factor (Chronic) = 1

Classification

Flam. Liq. 2 - H225 Skin Irrit. 2 - H315 STOT SE 3 - H336 Asp. Tox. 1 - H304 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410

# **Fluxclene**

Propan-2-ol 10-30%

CAS number: 67-63-0 EC number: 200-661-7 REACH registration number: 01-

2119457558-25-XXXX

Classification

Flam. Liq. 2 - H225 Eye Irrit. 2 - H319 STOT SE 3 - H336

1-Methoxy-2-propanol 10-30%

CAS number: 107-98-2 EC number: 203-539-1 REACH registration number: 01-

2119457435-35-XXXX

Classification

Flam. Liq. 3 - H226 STOT SE 3 - H336

Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

5-10%

CAS number: — EC number: 927-510-4 REACH registration number: 01-

2119475515-33-XXXX

Classification

Flam. Liq. 2 - H225 Skin Irrit. 2 - H315 STOT SE 3 - H336 Asp. Tox. 1 - H304 Aquatic Chronic 2 - H411

Orange Terpenes 1-5%

CAS number: 8028-48-6

Classification

Flam. Liq. 3 - H226 Skin Irrit. 2 - H315 Skin Sens. 1 - H317 Asp. Tox. 1 - H304 Aquatic Chronic 2 - H411

Carbon Dioxide 1-5%

CAS number: 124-38-9

Classification

Press. Gas, Compressed - H280

The full text for all hazard statements is displayed in Section 16.

#### **SECTION 4: First aid measures**

# 4.1. Description of first aid measures

General information Get medical attention immediately. Show this Safety Data Sheet to the medical personnel.

#### **Fluxclene**

Inhalation Remove affected person from source of contamination. Move affected person to fresh air and

keep warm and at rest in a position comfortable for breathing. Maintain an open airway. Loosen tight clothing such as collar, tie or belt. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Place unconscious person on

their side in the recovery position and ensure breathing can take place.

Ingestion Rinse mouth thoroughly with water. Remove any dentures. Give a few small glasses of water

or milk to drink. Stop if the affected person feels sick as vomiting may be dangerous. Do not induce vomiting unless under the direction of medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Place unconscious person on their side in the recovery position and ensure breathing can take place. Maintain an open airway. Loosen tight clothing

such as collar, tie or belt.

Skin contact It is important to remove the substance from the skin immediately. In the event of any

sensitisation symptoms developing, ensure further exposure is avoided. Remove

contamination with soap and water or recognised skin cleansing agent. Get medical attention

if symptoms are severe or persist after washing.

Eye contact Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide

apart. Continue to rinse for at least 10 minutes.

Protection of first aiders First aid personnel should wear appropriate protective equipment during any rescue. Wash

contaminated clothing thoroughly with water before removing it from the affected person, or wear gloves. It may be dangerous for first aid personnel to carry out mouth-to-mouth

resuscitation.

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

**General information** See Section 11 for additional information on health hazards. The severity of the symptoms

described will vary dependent on the concentration and the length of exposure.

**Inhalation** A single exposure may cause the following adverse effects: Headache. Nausea, vomiting.

Central nervous system depression. Drowsiness, dizziness, disorientation, vertigo. Narcotic

effect.

**Ingestion** May cause sensitisation or allergic reactions in sensitive individuals. Due to the physical

nature of this product, it is unlikely that ingestion will occur. Aspiration hazard if swallowed. Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis.

**Skin contact** May cause skin sensitisation or allergic reactions in sensitive individuals. Redness. Irritating to

skin.

**Eye contact** Irritating to eyes.

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

Notes for the doctor Treat symptomatically. May cause sensitisation or allergic reactions in sensitive individuals.

# SECTION 5: Firefighting measures

# 5.1. Extinguishing media

Suitable extinguishing media The product is flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder

or water fog. Use fire-extinguishing media suitable for the surrounding fire.

Unsuitable extinguishing

media

Do not use water jet as an extinguisher, as this will spread the fire.

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

# **Fluxclene**

#### Specific hazards

Containers can burst violently or explode when heated, due to excessive pressure build-up. Bursting aerosol containers may be propelled from a fire at high speed. If aerosol cans are ruptured, care should be taken due to the rapid escape of the pressurised contents and propellant. Vapours may form explosive mixtures with air.

# Hazardous combustion products

Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours.

#### 5.3. Advice for firefighters

# Protective actions during firefighting

Avoid breathing fire gases or vapours. Evacuate area. Keep upwind to avoid inhalation of gases, vapours, fumes and smoke. Ventilate closed spaces before entering them. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. If a leak or spill has not ignited, use water spray to disperse vapours and protect men stopping the leak. Avoid discharge to the aquatic environment. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.

# Special protective equipment for firefighters

Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing conforming to European standard EN469 (including helmets, protective boots and gloves) will provide a basic level of protection for chemical incidents.

#### **SECTION 6: Accidental release measures**

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

#### Personal precautions

No action shall be taken without appropriate training or involving any personal risk. Keep unnecessary and unprotected personnel away from the spillage. Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Wash thoroughly after dealing with a spillage. Ensure procedures and training for emergency decontamination and disposal are in place. Do not touch or walk into spilled material. Evacuate area. Risk of explosion. Provide adequate ventilation. No smoking, sparks, flames or other sources of ignition near spillage. Promptly remove any clothing that becomes contaminated. Avoid contact with skin and eyes.

# 6.2. Environmental precautions

### **Environmental precautions**

Avoid discharge into drains or watercourses or onto the ground. Avoid discharge to the aquatic environment. Large Spillages: Inform the relevant authorities if environmental pollution occurs (sewers, waterways, soil or air).

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

#### Methods for cleaning up

Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. Eliminate all ignition sources if safe to do so. No smoking, sparks, flames or other sources of ignition near spillage. Approach the spillage from upwind. Under normal conditions of handling and storage, spillages from aerosol containers are unlikely. If aerosol cans are ruptured, care should be taken due to the rapid escape of the pressurised contents and propellant. Small Spillages: Wipe up with an absorbent cloth and dispose of waste safely. Large Spillages: If the product is soluble in water, dilute the spillage with water and mop it up. Alternatively, or if it is not water-soluble, absorb the spillage with an inert, dry material and place it in a suitable waste disposal container. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Dangerous for the environment. Do not empty into drains. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

## 6.4. Reference to other sections

# **Fluxclene**

Reference to other sections

For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

## SECTION 7: Handling and storage

# 7.1. Precautions for safe handling

## Usage precautions

Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Avoid exposing aerosol containers to high temperatures or direct sunlight. The product is flammable. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid discharge to the aquatic environment. Do not handle until all safety precautions have been read and understood. Do not handle broken packages without protective equipment. Do not reuse empty containers. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Spray will evaporate and cool rapidly and may cause frostbite or cold burns if in contact with skin. Avoid contact with eyes. Avoid inhalation of vapours and spray/mists.

# Advice on general occupational hygiene

Wash promptly if skin becomes contaminated. Take off contaminated clothing. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet. Change work clothing daily before leaving workplace.

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

Storage precautions

Store away from incompatible materials (see Section 10). Store in accordance with local regulations. Keep away from oxidising materials, heat and flames. Keep only in the original container. Keep container tightly closed, in a cool, well ventilated place. Keep containers upright. Protect containers from damage. Protect from sunlight. Do not store near heat sources or expose to high temperatures. Do not expose to temperatures exceeding 50°C/122°F. Bund storage facilities to prevent soil and water pollution in the event of spillage. The storage area floor should be leak-tight, jointless and not absorbent.

#### Storage class

Miscellaneous hazardous material storage.

# 7.3. Specific end use(s)

Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

## SECTION 8: Exposure Controls/personal protection

# 8.1. Control parameters

#### Occupational exposure limits

## Cyclohexane

Long-term exposure limit (8-hour TWA): WEL 100 ppm 350 mg/m³ Short-term exposure limit (15-minute): WEL 300 ppm 1050 mg/m³

### Propan-2-ol

Long-term exposure limit (8-hour TWA): WEL 400 ppm 999 mg/m³ Short-term exposure limit (15-minute): WEL 500 ppm 1250 mg/m³

# 1-Methoxy-2-propanol

Long-term exposure limit (8-hour TWA): WEL 100 ppm 375 mg/m³ Short-term exposure limit (15-minute): WEL 150 ppm 560 mg/m³ Sk

#### Carbon Dioxide

Long-term exposure limit (8-hour TWA): WEL 5000 ppm 9150 mg/m<sup>3</sup> Short-term exposure limit (15-minute): WEL 15000 ppm 27400 mg/m<sup>3</sup>

#### **Fluxclene**

WEL = Workplace Exposure Limit Sk = Can be absorbed through the skin.

#### 8.2. Exposure controls

## Protective equipment







# Appropriate engineering controls

Provide adequate ventilation. Personal, workplace environment or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Use process enclosures, local exhaust ventilation or other engineering controls as the primary means to minimise worker exposure. Personal protective equipment should only be used if worker exposure cannot be controlled adequately by the engineering control measures. Ensure control measures are regularly inspected and maintained. Ensure operatives are trained to minimise exposure.

### Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Personal protective equipment for eye and face protection should comply with European Standard EN166. Wear tight-fitting, chemical splash goggles or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

#### Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, gloves should comply with European Standard EN374. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. Frequent changes are recommended.

# Other skin and body protection

Appropriate footwear and additional protective clothing complying with an approved standard should be worn if a risk assessment indicates skin contamination is possible.

#### Hygiene measures

Provide eyewash station and safety shower. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Clean equipment and the work area every day. Good personal hygiene procedures should be implemented. Wash at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke. Preventive industrial medical examinations should be carried out. Warn cleaning personnel of any hazardous properties of the product.

#### Respiratory protection

Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Ensure all respiratory protective equipment is suitable for its intended use and is 'CE'-marked. Check that the respirator fits tightly and the filter is changed regularly. Gas and combination filter cartridges should comply with European Standard EN14387. Full face mask respirators with replaceable filter cartridges should comply with European Standard EN136. Half mask and quarter mask respirators with replaceable filter cartridges should comply with European Standard EN140.

# Environmental exposure controls

Keep container tightly sealed when not in use. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

# **SECTION 9: Physical and Chemical Properties**

# 9.1. Information on basic physical and chemical properties

Appearance Aerosol.

Colour Colourless.

#### **Fluxclene**

Odour Fruity.

Odour threshold Not available.

pH Not available.

Melting point Not available.

Initial boiling point and range Not available.

**Evaporation rate** 16 (diethyl ether = 1)

Evaporation factor Not available.

Flammability (solid, gas) Not available.

Upper/lower flammability or

explosive limits

Flash point

Not available.

Not available.

Other flammability

Vapour pressure

Not available.

Vapour density

Not available.

Relative density

Not available.

Bulk density 0.78 kg/l

Solubility(ies) Immiscible with water.

Partition coefficientNot available.Auto-ignition temperatureNot available.Decomposition TemperatureNot available.ViscosityNot available.

**Explosive properties** Not considered to be explosive.

Oxidising properties Does not meet the criteria for classification as oxidising.

#### 9.2. Other information

# SECTION 10: Stability and reactivity

# 10.1. Reactivity

**Reactivity** See the other subsections of this section for further details.

10.2. Chemical stability

Stability Stable at normal ambient temperatures and when used as recommended. Stable under the

prescribed storage conditions.

# 10.3. Possibility of hazardous reactions

Possibility of hazardous

reactions

The following materials may react strongly with the product: Oxidising agents.

#### 10.4. Conditions to avoid

Conditions to avoid Avoid exposing aerosol containers to high temperatures or direct sunlight. Pressurised

container: may burst if heated

#### 10.5. Incompatible materials

# **Fluxclene**

Materials to avoid

No specific material or group of materials is likely to react with the product to produce a

hazardous situation.

10.6. Hazardous decomposition products

Hazardous decomposition

Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours.

# SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Acute toxicity - oral

products

Notes (oral LD₅o) Based on available data the classification criteria are not met.

Acute toxicity - dermal

Notes (dermal LD<sub>50</sub>) Based on available data the classification criteria are not met.

Acute toxicity - inhalation

Notes (inhalation LC<sub>50</sub>)

Based on available data the classification criteria are not met.

Skin corrosion/irritation

Animal data Irritating.

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye irritation.

Respiratory sensitisation

Respiratory sensitisation Based on available data the classification criteria are not met.

Skin sensitisation

**Skin sensitisation** May cause skin sensitisation or allergic reactions in sensitive individuals.

Germ cell mutagenicity

**Genotoxicity - in vitro**Based on available data the classification criteria are not met.

Carcinogenicity

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

IARC carcinogenicity

Contains a substance which may be potentially carcinogenic. IARC Group 3 Not classifiable

as to its carcinogenicity to humans.

Reproductive toxicity

Reproductive toxicity - fertility Based on available data the classification criteria are not met.

Reproductive toxicity -

Based on available data the classification criteria are not met.

development

Specific target organ toxicity - single exposure

**STOT - single exposure** STOT SE 3 - H336 May cause drowsiness or dizziness.

Target organs Central nervous system

Specific target organ toxicity - repeated exposure

**STOT - repeated exposure** Not classified as a specific target organ toxicant after repeated exposure.

Aspiration hazard

Asp. Tox. 1 - H304 May be fatal if swallowed and enters airways. Pneumonia may be the

result if vomited material containing solvents reaches the lungs.

#### **Fluxclene**

General information The severity of the symptoms described will vary dependent on the concentration and the

length of exposure.

**Inhalation** A single exposure may cause the following adverse effects: Headache. Nausea, vomiting.

Central nervous system depression. Drowsiness, disziness, disorientation, vertigo. Narcotic

effect.

Ingestion May cause sensitisation or allergic reactions in sensitive individuals. Due to the physical

nature of this product, it is unlikely that ingestion will occur. Aspiration hazard if swallowed. Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis.

Skin contact May cause skin sensitisation or allergic reactions in sensitive individuals. Redness. Irritating to

skin.

Eye contact Irritating to eyes.

Route of entry Ingestion Inhalation Skin and/or eye contact

Target organs Central nervous system

**Medical considerations** Skin disorders and allergies.

## Propan-2-ol

Acute toxicity - dermal

Notes (dermal LD<sub>50</sub>) LD<sub>50</sub> 5840 mg/kg, Oral, Rat REACH dossier information. Based on available data

the classification criteria are not met.

Skin corrosion/irritation

Animal data Primary dermal irritation index: 0 REACH dossier information. Based on available

data the classification criteria are not met.

Serious eye damage/irritation

Serious eye

Dose: 0.1 mL, 1 second, Rabbit Causes serious eye irritation.

damage/irritation

Skin sensitisation

Skin sensitisation Buehler test - Guinea pig: Not sensitising. REACH dossier information. Based on

available data the classification criteria are not met.

Germ cell mutagenicity

Gene mutation: Negative. REACH dossier information. Based on available data the

classification criteria are not met.

Genotoxicity - in vivo Chromosome aberration: Negative. REACH dossier information. Based on available

data the classification criteria are not met.

Carcinogenicity

Carcinogenicity NOAEL 5000 ppm, Inhalation, Rat REACH dossier information. Based on available

data the classification criteria are not met.

IARC carcinogenicity IARC Group 3 Not classifiable as to its carcinogenicity to humans.

Specific target organ toxicity - single exposure

**STOT - single exposure** STOT SE 3 - H336 May cause drowsiness or dizziness.

Target organs Central nervous system

Specific target organ toxicity - repeated exposure

# **Fluxclene**

STOT - repeated exposure NOAEC 5000 ppm, Inhalation, Rat REACH dossier information. Based on available

data the classification criteria are not met.

1-Methoxy-2-propanol

Acute toxicity - oral

Acute toxicity oral (LD₅o

LD<sub>50</sub> 3,739.0

mg/kg)

Species Rat

Notes (oral LD50) LD50 3739 mg/kg, Oral, Rat REACH dossier information. Based on available data

the classification criteria are not met.

**ATE oral (mg/kg)** 3,739.0

Acute toxicity - dermal

Notes (dermal LD<sub>50</sub>) LD<sub>50</sub> >2000 mg/kg, Dermal, Rat REACH dossier information. Based on available

data the classification criteria are not met.

Skin corrosion/irritation

Animal data Dose: 0.5 mL, 4 hours, Rabbit Erythema/eschar score: No erythema (0). Oedema

score: No oedema (0). REACH dossier information. Based on available data the

classification criteria are not met.

Skin sensitisation

Skin sensitisation Guinea pig maximization test (GPMT) - Guinea pig: Not sensitising. REACH dossier

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

Germ cell mutagenicity

Genotoxicity - in vitro Gene mutation: Negative. REACH dossier information. Based on available data the

classification criteria are not met.

Genotoxicity - in vivo Chromosome aberration: Negative. REACH dossier information. Based on available

data the classification criteria are not met.

Carcinogenicity

Carcinogenicity NOEL 3000 ppm, Inhalation, Mouse REACH dossier information. Based on

available data the classification criteria are not met.

Reproductive toxicity

Reproductive toxicity -

fertility

Two-generation study - NOAEL 1000 ppm, Inhalation, Rat F1 REACH dossier information. Based on available data the classification criteria are not met.

Reproductive toxicity -

development

Teratogenicity: - NOAEL: 1500 ppm, Inhalation, Rat REACH dossier information.

Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

STOT - single exposure STOT SE 3 - H336 May cause drowsiness or dizziness. REACH dossier

information.

Target organs Central nervous system Brain

Specific target organ toxicity - repeated exposure

STOT - repeated exposure NOAEL 919 mg/kg/day, Oral, Rat REACH dossier information. Based on available

data the classification criteria are not met.

#### **Fluxclene**

# Orange Terpenes

Acute toxicity - oral

Notes (oral LD<sub>50</sub>) LD<sub>50</sub> 4400 mg/kg, Oral, Rat

Acute toxicity - dermal

Notes (dermal LD<sub>50</sub>) LD<sub>50</sub> >2000 mg/kg, Dermal, Rabbit

2-Methoxypropanol

Acute toxicity - oral

Notes (oral LD<sub>50</sub>) LD<sub>50</sub> 5710 mg/kg, Oral, Rat Based on available data the classification criteria are

not met.

Acute toxicity - dermal

Notes (dermal LD₅o) LD₅o 5660 mg/kg, Dermal, Rabbit Based on available data the classification criteria

are not met.

Skin corrosion/irritation

**Skin corrosion/irritation** Irritating to skin.

Serious eye damage/irritation

Serious eye May cause serious eye damage.

damage/irritation

Reproductive toxicity

Reproductive toxicity - Maternal toxicity: - Dose level:: 545 ppm, Inhalation, Rabbit May damage the

development unborn child.

Specific target organ toxicity - single exposure

**STOT - single exposure** STOT SE 3 - H335 May cause respiratory system irritation.

Target organs Respiratory system, lungs

# SECTION 12: Ecological Information

# 12.1. Toxicity

**Toxicity** Aquatic Acute 1 - H400 Very toxic to aquatic life. Aquatic Chronic 1 - H410 Very toxic to

aquatic life with long lasting effects.

## Cyclohexane

Acute aquatic toxicity

**LE(C)**<sub>50</sub>  $0.1 < L(E)C50 \le 1$ 

M factor (Acute) 1

Acute toxicity - fish LC<sub>80</sub>, 4 days: 4.5 mg/l, Pimephales promelas (Fat-head Minnow)

Acute toxicity - aquatic

invertebrates

EC₅o, 2 days: 0.9 mg/l, Daphnia magna

Acute toxicity - aquatic

plants

EC₅o, 3 days: 9.317 mg/l, Selenastrum capricornutum

Chronic aquatic toxicity

#### **Fluxclene**

M factor (Chronic) 1

Propan-2-ol

Aquatic toxicity is unlikely to occur. Based on available data the classification **Toxicity** 

criteria are not met.

Acute toxicity - fish LC<sub>50</sub>, 96 hours: 10000 mg/l, Pimephales promelas (Fat-head Minnow)

Acute toxicity - aquatic

invertebrates

LC<sub>50</sub>, 24 hours: >10000 mg/l, Daphnia magna

Acute toxicity - aquatic

plants

EC<sub>50</sub>, 7 days: 1800 mg/l, Scenedesmus quadricauda

1-Methoxy-2-propanol

Acute toxicity - fish LC<sub>50</sub>, 96 hours: 20800 mg/l, Pimephales promelas (Fat-head Minnow)

REACH dossier information.

Acute toxicity - aquatic

invertebrates

LC<sub>50</sub>, 48 hours: 21100 mg/l, Daphnia magna

REACH dossier information.

Acute toxicity - aquatic

plants

EC<sub>50</sub>, 7 days: >1000 mg/l, Selenastrum capricornutum

REACH dossier information.

2-Methoxypropanol

Acute toxicity - fish LC<sub>50</sub>, 96 hours: >1006 mg/l, Algae, Estimated value.

Acute toxicity - aquatic

invertebrates

EC₅o, 48 hours: >13205 mg/l, Daphnia magna, Estimated value.

#### 12.2. Persistence and degradability

**Persistence and degradability** The degradability of the product is not known.

Propan-2-ol

Persistence and

degradability

The substance is readily biodegradable.

**Biodegradation** Water - Degradation 53%: 5 days

Biological oxygen demand 1.19-1.72 g O<sub>2</sub>/g substance

Chemical oxygen demand 2.23 g O<sub>2</sub>/g substance

1-Methoxy-2-propanol

Persistence and

degradability

The substance is readily biodegradable.

**Phototransformation** Water - DT<sub>50</sub>: 3.1 hours

REACH dossier information.

Water - Degradation 96%: 28 days Biodegradation

REACH dossier information.

#### **Fluxclene**

# 2-Methoxypropanol

**Biodegradation** No data available.

12.3. Bioaccumulative potential

**Bioaccumulative potential** No data available on bioaccumulation.

Partition coefficient Not available.

Cyclohexane

Partition coefficient log Kow: 3.44

Propan-2-ol

Bioaccumulative potential Bioaccumulation is unlikely.

1-Methoxy-2-propanol

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient log Pow: <1 REACH dossier information.

**Orange Terpenes** 

Bioaccumulative potential Potentially bioaccumulating.

2-Methoxypropanol

Bioaccumulative potential BCF: ~ 1 - 10, Estimated value. Bioaccumulation is unlikely.

12.4. Mobility in soil

Mobility The product contains volatile organic compounds (VOCs) which will evaporate easily from all

surfaces.

Propan-2-ol

**Mobility** The product is soluble in water.

1-Methoxy-2-propanol

Mobile.

Surface tension 70.7 mN/m @ 20°C

2-Methoxypropanol

**Mobility** Soluble in water.

Adsorption/desorption - log Kow: ~ (-0.45) - (-0.49) @ 25°C Calculation method. - Log Koc: ~ 0.0 - 1.13 @

**coefficient** 25°C Calculation method.

# 12.5. Results of PBT and vPvB assessment

## Propan-2-ol

#### **Fluxclene**

Results of PBT and vPvB assessment

This substance is not classified as PBT or vPvB according to current EU criteria.

# 1-Methoxy-2-propanol

Results of PBT and vPvB assessment

This substance is not classified as PBT or vPvB according to current EU criteria.

# **Orange Terpenes**

Results of PBT and vPvB assessment

This product does not contain any substances classified as PBT or vPvB.

# 2-Methoxypropanol

Results of PBT and vPvB assessment

This substance is not classified as PBT or vPvB according to current EU criteria.

# 12.6. Other adverse effects

Other adverse effects None known.

#### **Orange Terpenes**

Other adverse effects Dangerous for the environment.

## SECTION 13: Disposal considerations

# 13.1. Waste treatment methods

General information

The generation of waste should be minimised or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way. Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous.

#### Disposal methods

Do not empty into drains. Empty containers must not be punctured or incinerated because of the risk of an explosion. Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled with their contents.

# SECTION 14: Transport information

General For limited quantity packaging/limited load information, consult the relevant modal

documentation using the data shown in this section.

14.1. UN number

**UN No. (ADR/RID)** 1950

**UN No. (IMDG)** 1950

**UN No. (ICAO)** 1950

**UN No. (ADN)** 1950

## 14.2. UN proper shipping name

#### **Fluxclene**

Proper shipping name

**AEROSOLS** 

(ADR/RID)

Proper shipping name (IMDG) AEROSOLS (CONTAINS Cyclohexane, Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics)

Proper shipping name (ICAO) AEROSOLS

Proper shipping name (ADN) AEROSOLS

# 14.3. Transport hazard class(es)

ADR/RID class 2.1

ADR/RID classification code 5F

ADR/RID label 2.1

IMDG class 2.1

ICAO class/division 2.1

ADN class 2.1

#### Transport labels



#### 14.4. Packing group

ADR/RID packing group None

IMDG packing group None

ADN packing group None

ICAO packing group None

# 14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant



# 14.6. Special precautions for user

Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

EmS F-D, S-U

ADR transport category 2

Tunnel restriction code (D)

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

**Transport in bulk according to** Not applicable.

Annex II of MARPOL 73/78

and the IBC Code

# SECTION 15: Regulatory information

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

#### **Fluxclene**

National regulations Health and Safety at Work etc. Act 1974 (as amended).

The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment

Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"].

EH40/2005 Workplace exposure limits.

The Aerosol Dispensers Regulations 2009 (SI 2009 No. 2824).

**EU** legislation Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18

December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of

Chemicals (REACH) (as amended).

Commission Regulation (EU) No 2015/830 of 28 May 2015.

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as

amended).

Council Directive of 20 May 1975 on the approximation of the laws of the Member States

relating to aerosol dispensers (75/324/EEC) (as amended).

#### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

#### Inventories

#### **EU - EINECS/ELINCS**

None of the ingredients are listed or exempt.

#### SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet ADR: European Agreement concerning the International Carriage of Dangerous Goods by

Road.

ADN: European Agreement concerning the International Carriage of Dangerous Goods by

Inland Waterways.

RID: European Agreement concerning the International Carriage of Dangerous Goods by

Rail

IATA: International Air Transport Association.

ICAO-TI: Technical Instructions for the Safe Transport of Dangerous Goods by Air.

IMDG: International Maritime Dangerous Goods.

CAS: Chemical Abstracts Service.

ATE: Acute Toxicity Estimate.

LC₅o: Lethal Concentration to 50 % of a test population.

LD₅o: Lethal Dose to 50% of a test population (Median Lethal Dose).

EC<sub>50</sub>: 50% of maximal Effective Concentration.

PBT: Persistent, Bioaccumulative and Toxic substance.

vPvB: Very Persistent and Very Bioaccumulative.

Classification abbreviations and acronyms

Aerosol = Aerosol Eve Irrit. = Eve irritation

Skin Irrit. = Skin irritation Skin Sens. = Skin sensitisation

STOT SE = Specific target organ toxicity-single exposure Aquatic Acute = Hazardous to the aquatic environment (acute) Aquatic Chronic = Hazardous to the aquatic environment (chronic)

Classification procedures according to Regulation (EC)

1272/2008

Asp. Tox. 1 - H304: STOT SE 3 - H336: Skin Irrit. 2 - H315: Eye Irrit. 2 - H319: Skin Sens. 1 -H317: : Calculation method. Aquatic Acute 1 - H400: Aquatic Chronic 1 - H410: : Calculation

method. Aerosol 1 - H222, H229: : Expert judgement.

Training advice Read and follow manufacturer's recommendations. Only trained personnel should use this

material.

#### **Fluxclene**

**Issued by** Toni Ashford

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Revision 0

SDS number 804

Hazard statements in full H222 Extremely flammable aerosol.

H225 Highly flammable liquid and vapour.

H226 Flammable liquid and vapour.

H229 Pressurised container: may burst if heated

H280 Contains gas under pressure; may explode if heated.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects. H411 Toxic to aquatic life with long lasting effects.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.