

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: SNOW GLOW Product code: BL002660-34079-EN.

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

This product will glow in the dark after exposure to a bright light source. Best results with sudden darkness. Only use the product as directed on the aerosol.

1.3. Details of the supplier of the safety data sheet

Registered company name: Volcke Aerosol Company NV. Address: Industrielaan 15. B-8520. Kuurne. Belgium. Telephone: +32 (0) 56 35 17 23. Fax: +32 (0) 56 35 30 69.

info@volcke-aerosol-connection.com http://www.volcke-aerosol-connection.com

1.4. Emergency telephone number: +32 (0) 56 35 17 23.

Association/Organisation: http://www.volcke-aerosol-connection.com. Hours of operation: Monday - Thursday: 8:00-17:00; Friday: 8:00-13:00

Other emergency numbers

United Kingdom: National Poisons Information Service: +44 (0)844 892 0111. Ireland: Poisons Information Centre of Ireland: +353 1 809 2166. Malta: Emergency number: 112; Medicines & Poisons info Office: 2545 6508.

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

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

Aerosol, Category 3 (Aerosol 3, H229).

This mixture does not present a health hazard with the exception of possible occupational exposure thresholds (see paragraphs 3 and 8).

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

2.2. Label elements

Mixture for aerosol application.

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

Signal Word:

WARNING

Additional labeling:

20% by mass of the contents are flammable.

Hazard statements:

H229 Pressurised container: May burst if heated.

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:

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

P251 Do not pierce or burn, even after use.

Precautionary statements - Storage:

P410 + P412Protect from sunlight. Do not expose to temperatures exceeding 50 °C.

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.

Intentional misuse of the preparation by concentrating and inhaling the vapours can be harmful or fatal.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Composition:

| Identification | (EC) 1272/2008 | Note | % |
|--------------------------------|---------------------|------|----------------------|
| CAS: 57-55-6 | | [1] | $2.5 \le x \% < 10$ |
| EC: 200-338-0 | | | |
| REACH: 01-2119456809-23 | | | |
| | | | |
| PROPANE-1,2-DIOL | | | |
| CAS: 109-87-5 | GHS02 | [1] | $2.5 \le x \% < 10$ |
| EC: 203-714-2 | Dgr | | |
| REACH: 01-2119664781-31 | Flam. Liq. 2, H225 | | |
| | | | |
| METHYLAL | | | |
| CAS: 106-97-8 | GHS02 | C | $2.5 \le x \% < 10$ |
| EC: 203-448-7 | Dgr | [1] | |
| REACH: 01-2119474691-32-XXXX | Flam. Gas 1, H220 | [7] | |
| | Press. Gas, H280 | | |
| BUTANE (< 0,1 % 1,3-BUTADIENE) | | | |
| CAS: 74-98-6 | GHS02 | [1] | $2.5 \le x \% < 10$ |
| EC: 200-827-9 | Dgr | [7] | |
| REACH: 01-2119486944-21-XXXX | Flam. Gas 1, H220 | | |
| | Press. Gas, H280 | | |
| PROPANE | | | |
| CAS: 102-71-6 | | [1] | $0.1 \le x \% \le 1$ |
| EC: 203-049-8 | | | |
| REACH: 0-2119486482-31 | | | |
| | | | |
| 2,2',2"-NITRILOTRIETHANOL | | | |
| CAS: 111-42-2 | GHS08, GHS07, GHS05 | [1] | 0 >= x % < 0.001 |
| EC: 203-868-0 | Dgr | [2] | |
| REACH: 01-2119488930-28 | Acute Tox. 4, H302 | | |
| | Skin Irrit. 2, H315 | | |
| DIETHANOLAMINE | Eye Dam. 1, H318 | | |
| | Repr. 2, H361fd | | |
| | STOT RE 2, H373 | | |

Specific concentration limits:

| Specific concentration limits: | | |
|--------------------------------|-------------------------------|-----------------------------|
| Identification | Specific concentration limits | ATE |
| CAS: 57-55-6 | | oral: ATE = 22000 mg/kg BW |
| EC: 200-338-0 | | |
| REACH: 01-2119456809-23 | | |
| PROPANE 1.2 PIOI | | |
| PROPANE-1,2-DIOL | | |
| CAS: 109-87-5 | | oral: ATE = 6453 mg/kg BW |
| EC: 203-714-2 | | |
| REACH: 01-2119664781-31 | | |
| | | |
| METHYLAL | | |
| CAS: 102-71-6 | | inhalation: ATE = 1.8 mg/l |
| EC: 203-049-8 | | (dust/mist) |
| REACH: 0-2119486482-31 | | oral: ATE = 6400 mg/kg BW |
| | | |
| 2,2',2"-NITRILOTRIETHANOL | | |
| CAS: 111-42-2 | | inhalation: ATE = 3.35 mg/l |
| EC: 203-868-0 | | (dust/mist) |
| REACH: 01-2119488930-28 | | oral: ATE = 1600 mg/kg BW |
| | | |
| DIETHANOLAMINE | | |

Information on ingredients:

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

- [7] Propellant gas
- [1] Substance for which maximum workplace exposure limits are available.
- [2] Carcinogenic, mutagenic or reprotoxic (CMR) substance.

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:

In the event of massive inhalation, remove the person exposed to fresh air. Keep warm and at rest.

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:

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

In the event of swallowing:

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, 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

See section 11.

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

If you feel unwell, seek medical advice (show the label if possible). If symptoms persist, always call a doctor.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

If the aerosols are exposed to a fire: keep containers cool by spraying with water from a protected position.

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)

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)

In a fire or if heated, a pressure increase will occur and the container may burst. Bursting aerosol containers may be propelled from a fire at high speed. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

5.3. Advice for firefighters

If possible, stop the product stream. Spray from a protected position till the containers are cool. If possible, take the aerosols outside. Keep public at a distance.

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 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.

7.1. Precautions for safe handling

Always wash hands after handling.

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

Fire prevention:

Handle in well-ventilated areas.

Do not pierce or burn, even after use.

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.

Do not breathe in aerosols.

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.

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.

Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C.

Keep away from heat and sources of ignition. Storage in a dry, frost-free and well ventilated place.

Store upright.

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:

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

| CAS | TWA: | STEL: | Ceiling: | Definition: | Criteria: |
|----------|------------------------|------------------------|----------|-------------|-----------|
| 57-55-6 | 10 mg/m ³ | | | | |
| 109-87-5 | 1000 ppm | 1250 ppm | | | |
| | 3160 mg/m ³ | 3950 mg/m ³ | | | |
| 106-97-8 | 600 ppm | 750 ppm | | Carc | |
| | 1450 mg/m3 | 1810 mg/m3 | | | |

- Ireland (Code of practice for the Chemical Agents Regulations, 2016):

| CAS | TWA: | STEL: | Ceiling: | Definition: | Criteria: |
|-------------------|----------------------|------------|----------|-------------|-----------|
| 57-55-6 | 10 mg/m ³ | | | | |
| 109-87-5 1000 ppm | | 1250 ppm | | | |
| | 3100 mg/m3 | 3880 mg/m3 | | | |
| 106-97-8 | 1000 ppm | | | | |
| 74-98-6 | 1000 ppm | | | | |

| 102-71-6 | 5 mg/m ³ | | |
|----------|---------------------|--|--|
| 111-42-2 | 0.2 ppm | | |
| | 1 mg/m^3 | | |

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

DIETHANOLAMINE (CAS: 111-42-2)

Final use: Workers.
Exposure method: Dermal contact.

Potential health effects: Long term systemic effects.

DNEL: 0.13 mg/kg body weight/day

Exposure method: Inhalation.

Potential health effects: Short term systemic effects.
DNEL: 33 mg of substance/m3

Exposure method: Inhalation.

Potential health effects: Long term local effects. DNEL: 0.5 mg of substance/m3

Exposure method: Inhalation.

Potential health effects: Long term systemic effects.

DNEL: 0.75 mg of substance/m3

Final use: Consumers.

Exposure method: Ingestion.

Potential health effects: Long term systemic effects.

DNEL: 0.06 mg/kg body weight/day

Exposure method: Dermal contact.

Potential health effects: Long term systemic effects.

DNEL: 0.07 mg/kg body weight/day

Exposure method: Inhalation.

Potential health effects: Long term local effects.

DNEL: 0.125 mg of substance/m3

Exposure method: Inhalation.

Potential health effects: Long term systemic effects.

DNEL: 0.125 mg of substance/m3

2,2',2"-NITRILOTRIETHANOL (CAS: 102-71-6)

Final use: Workers.
Exposure method: Dermal contact.

Potential health effects: Long term systemic effects.

DNEL: 6.3 mg/kg body weight/day

Exposure method: Inhalation.

Potential health effects: Long term local effects.
DNEL: 5 mg of substance/m3

Exposure method: Inhalation.

Potential health effects: Long term systemic effects.

DNEL: 5 mg of substance/m3

Final use: Consumers.

Exposure method: Ingestion.

Potential health effects: Long term systemic effects.

DNEL: 13 mg/kg body weight/day

Exposure method: Dermal contact.

Potential health effects: Long term systemic effects. DNEL: 3.1 mg/kg body weight/day

Exposure method: Inhalation.

Potential health effects: Long term local effects. DNEL: 1.25 mg of substance/m3

Exposure method: Inhalation.

Potential health effects: Long term systemic effects. DNEL: 1.25 mg of substance/m3

METHYLAL (CAS: 109-87-5)

Final use:

Workers. Exposure method: Dermal contact.

Potential health effects: Long term systemic effects. DNEL: 17.9 mg/kg body weight/day

Exposure method:

Potential health effects: Long term systemic effects. 126.6 mg of substance/m3

DNEL:

Final use: Consumers.

Exposure method: Ingestion. Potential health effects: Long term systemic effects. DNEL: 18.1 mg/kg body weight/day

Exposure method: Dermal contact.

Potential health effects: Long term systemic effects. DNEL: 18.1 mg/kg body weight/day

Exposure method: Inhalation.

Long term systemic effects. Potential health effects: DNEL: 31.5 mg of substance/m3

PROPANE-1,2-DIOL (CAS: 57-55-6)

Final use:

Exposure method: Inhalation. Potential health effects: Long term systemic effects.

Workers.

DNEL: 168 mg of substance/m3

Exposure method: Inhalation.

Potential health effects: Long term local effects. DNEL: 10 mg of substance/m3

Final use:

Consumers. Exposure method: Inhalation.

Potential health effects: Long term systemic effects. DNEL: 50 mg of substance/m3

Exposure method: Inhalation.

Potential health effects: Long term local effects. DNEL: 10 mg of substance/m3

Predicted no effect concentration (PNEC):

DIETHANOLAMINE (CAS: 111-42-2)

Environmental compartment: Soil. PNEC: 1.63 mg/kg

Environmental compartment: Fresh water.

PNEC: 0.02 mg/l

Environmental compartment: Sea water. PNEC: 0.002 mg/l

Environmental compartment: Intermittent waste water.

PNEC: 0.095 mg/l

Environmental compartment: Fresh water sediment.

PNEC: 0.092 mg/kg

Environmental compartment: Marine sediment. PNEC: 0.0092 mg/kg

Environmental compartment: Waste water treatment plant.

PNEC: 100 mg/l

2,2',2"-NITRILOTRIETHANOL (CAS: 102-71-6)

Environmental compartment: Soil.

PNEC: 0.151 mg/kg

Environmental compartment: Fresh water. PNEC: 0.32 mg/l

Environmental compartment: Sea water. PNEC: 0.032 mg/l

Environmental compartment: Intermittent waste water.

PNEC: 5.12 mg/l

Environmental compartment: Fresh water sediment.

PNEC: 1.7 mg/kg

Environmental compartment: Marine sediment. PNEC: 0.17 mg/kg

Environmental compartment: Waste water treatment plant.

PNEC: 10 mg/l

METHYLAL (CAS: 109-87-5)

Environmental compartment: Soil.

PNEC: 4.6538 mg/kg

Environmental compartment: Fresh water. PNEC: 14.577 mg/l

Environmental compartment: Sea water. PNEC: 1.477 mg/l

Environmental compartment: Fresh water sediment. PNEC: 13.135 mg/kg

Environmental compartment: Marine sediment. PNEC: 1.313 mg/kg

Environmental compartment: Waste water treatment plant.

PNEC: 10 g/l

PROPANE-1,2-DIOL (CAS: 57-55-6)

Environmental compartment: Soil.

PNEC: 50 mg/kg

Environmental compartment: Fresh water. PNEC: 260 mg/l

Environmental compartment: Sea water. PNEC: 26 mg/l

Environmental compartment: Intermittent waste water.

PNEC: 183 mg/l

Environmental compartment: Fresh water sediment.

PNEC: 572 mg/kg

Environmental compartment: Marine sediment. PNEC: 57.2 mg/kg

Environmental compartment: Waste water treatment plant.

PNEC: 20000 mg/l

Environmental compartment: Vermivore predators (oral).

PNEC: 1133 mg/kg

8.2. Exposure controls

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.

Do not spray in the direction of the eyes.

- Hand protection

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

Type of gloves recommended:

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

Not necessary at efficient use. Wash your hands after contact with skin.

- Body protection

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.

Not necessary at efficient use. Wash skin that has been in contact with the product, with water and soap.

- Respiratory protection

Anti-gas and vapour filter(s) (Combined filters) in accordance with standard EN14387:

- A1 (Brown)

Do not breathe spray. Use only in well-ventilated areas.

Exposure controls linked to environmental protection

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

Physical state

Physical state: Fluid liquid.

Colour

White, luminescent

Odour

Odour threshold : Not stated.
Odour : Specific

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.

Flammability:

Not applicable

Lower and upper explosion limit

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

Flash point

Flash point interval: Not relevant.

Auto-ignition temperature

Self-ignition temperature: Not relevant.

Decomposition temperature

Decomposition point/decomposition range: Not relevant.

pН

pH (aqueous solution):

pH:

7.00 .

Neutral.

Kinematic viscosity

Viscosity: Not stated.

Solubility

Water solubility: Soluble.
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: 0.920

Relative vapour density

Vapour density: Not stated.

9.2. Other information

Pressure at 20°C : \pm 5.0 bar Pressure at 50°C : < 10 bar

Water content: Water-based formulation

9.2.1. Information with regard to physical hazard classes

No data available.

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.

Under normal conditions of storage and use, hazardous reactions will not occur.

10.4. Conditions to avoid

Avoid:

- frost
- heat
- flames and hot surfaces

Protect from sunlight and do not expose to temperatures exceeding 50°C. Keep away from heat and sources of ignition. Storage in a dry, frost-free and well ventilated place.

10.5. Incompatible materials

No materials known by which a dangerous reaction can occur.

10.6. Hazardous decomposition products

The thermal decomposition may release/form:

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

The product is stable. Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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

11.1.1. Substances

Acute toxicity:

PROPANE (CAS: 74-98-6)

Inhalation route (Dusts/mist): LC50 > 10 mg/l

BUTANE (< 0,1 % 1,3-BUTADIENE) (CAS: 106-97-8)

Inhalation route (Vapours): LC50 > 10 mg/l

DIETHANOLAMINE (CAS: 111-42-2)

Oral route : LD50 = 1600 mg/kg

Species: Rat

OECD Guideline 401 (Acute Oral Toxicity)

Dermal route : LD50 > 8200 mg/kgSpecies : Rabbit

OECD Guideline 402 (Acute Dermal Toxicity)

Inhalation route (Dusts/mist): LC50 = 3.35 mg/l Species: Rat

OECD Guideline 403 (Acute Inhalation Toxicity)

2,2',2"-NITRILOTRIETHANOL (CAS: 102-71-6)

Oral route: LD50 = 6400 mg/kg

Species: Rat

OECD Guideline 401 (Acute Oral Toxicity)

Dermal route: LD50 > 2000 mg/kg

Species: Rabbit

OECD Guideline 402 (Acute Dermal Toxicity)

Inhalation route (Dusts/mist): LC50 = 1.8 mg/l

Species: Rat

OECD Guideline 403 (Acute Inhalation Toxicity)

METHYLAL (CAS: 109-87-5)

Oral route: LD50 = 6453 mg/kg

Species: Rat

OECD Guideline 423 (Acute Oral toxicityAcute Toxic Class Method)

 $Dermal \ route: \\ LD50 > 5000 \ mg/kg$

Species: Rabbit

OECD Guideline 402 (Acute Dermal Toxicity)

PROPANE-1,2-DIOL (CAS: 57-55-6)

Oral route: LD50 = 22000 mg/kg

Species: Rat

Dermal route: LD50 > 2000 mg/kg

Species: Rat

Skin corrosion/skin irritation:

Methylal: Not irritating. Repeated or prolonged skin contact may cause dermatitis and defatting. Butane/Isobutane/Propane: Based on available data, the classification criteria are not met.

Propane-1,2-diol: Skin contact can cause eczema due to damage.

2,2',2",-Nitrilotriethanol : No skin irritation.
Diethanolamine : Irritating for the skin.
DIETHANOLAMINE (CAS: 111-42-2)

Corrosivity: No observed effect.

Species: Rabbit

OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

2,2',2"-NITRILOTRIETHANOL (CAS: 102-71-6)

Species: Rabbit

OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

METHYLAL (CAS: 109-87-5)

Species: Rabbit

OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

Irritation: Average score = 4.2

Effect observed: Primary dermal irritation index (PDII)

Species: Rabbit

Duration of exposure: 72 h

OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

Serious damage to eyes/eye irritation:

Methylal: Not irritating.

Butane/Isobutane/Propane: Based on available data, the classification criteria are not met.

Propane-1,2-diol: May irritate the eyes. 2,2',2"-Nitrilotriethanol: No eye irritation. Diethanolamine: Causes serious eye damage.

Respiratory or skin sensitisation:

Butane/Isobutane/Propane : Based on available data, the classification criteria are not met.

Propane-1,2-diol: Not sensitizing.

DIETHANOLAMINE (CAS: 111-42-2)

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

Species: Guinea pig

OECD Guideline 406 (Skin Sensitisation)

2,2',2"-NITRILOTRIETHANOL (CAS: 102-71-6)

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

Species: Guinea pig

OECD Guideline 406 (Skin Sensitisation)

METHYLAL (CAS: 109-87-5)

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

Species: Guinea pig

OECD Guideline 406 (Skin Sensitisation)

Germ cell mutagenicity:

DIETHANOLAMINE (CAS: 111-42-2)

No mutagenic effect.

2,2',2"-NITRILOTRIETHANOL (CAS: 102-71-6)

No mutagenic effect.

PROPANE (CAS: 74-98-6)

No mutagenic effect.

BUTANE (< 0,1 % 1,3-BUTADIENE) (CAS: 106-97-8)

No mutagenic effect.

METHYLAL (CAS: 109-87-5)

No mutagenic effect.

Mutagenesis (in vivo): Negative.

Species: Mouse

OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)

Mutagenesis (in vitro): Negative.

Species: Mammalian Cell Line

OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)

PROPANE-1,2-DIOL (CAS: 57-55-6)

No mutagenic effect.

Carcinogenicity:

DIETHANOLAMINE (CAS: 111-42-2)

Species: Rat

OECD Guideline 451 (Carcinogenicity Studies)

2,2',2"-NITRILOTRIETHANOL (CAS: 102-71-6)

Negative. Carcinogenicity Test:

No carcinogenic effect.

Species: Rat

OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)

PROPANE (CAS: 74-98-6)

Carcinogenicity Test: Negative.

No carcinogenic effect.

BUTANE (< 0,1 % 1,3-BUTADIENE) (CAS: 106-97-8)

Carcinogenicity Test: Negative.

No carcinogenic effect.

METHYLAL (CAS: 109-87-5)

Carcinogenicity Test: Negative.

No carcinogenic effect.

PROPANE-1,2-DIOL (CAS: 57-55-6)

Carcinogenicity Test: Negative.

No carcinogenic effect.

Reproductive toxicant:

DIETHANOLAMINE (CAS: 111-42-2) No toxic effect for reproduction

Suspected of damaging fertility and the unborn

child.

2,2',2"-NITRILOTRIETHANOL (CAS: 102-71-6)

No toxic effect for reproduction

PROPANE (CAS: 74-98-6) No toxic effect for reproduction

BUTANE (< 0,1 % 1,3-BUTADIENE) (CAS: 106-97-8)

No toxic effect for reproduction

METHYLAL (CAS: 109-87-5) No toxic effect for reproduction

PROPANE-1,2-DIOL (CAS: 57-55-6) No toxic effect for reproduction

Specific target organ systemic toxicity - single exposure :

Methylal: To human: Not classified for organ toxicity. For animals: No effects known. Butane/Isobutane/Propane: Based on available data, the classification criteria are not met. Propane-1,2-diol: To human: Not classified for organ toxicity. For animals: No effects known.

2,2',2"-Nitrilotriethanol: No data available.

Diethanolamine: The substance is not classified as specific target organ systemic toxicity - single exposure.

Specific target organ systemic toxicity - repeated exposure :

Methylal: To human: Not classified for organ toxicity. For animals: No effects known.

Butane/Isobutane/Propane: Based on available data, the classification criteria are not met.

Propane-1,2-diol: To human: Not classified for organ toxicity. For animals: No effects known.

2,2',2"-Nitrilotriethanol: No data available.

Diethanolamine: Target organs: Liver, kidney, blood, central nervous system. May cause damage to organs through prolonged or repeated exposure.

DIETHANOLAMINE (CAS: 111-42-2)

Oral route: C = 14 mg/kg bodyweight/day

Species: Rat

Duration of exposure : 90 days

OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)

2,2',2"-NITRILOTRIETHANOL (CAS: 102-71-6)

Oral route: C = 1000 mg/kg bodyweight/day

Species: Rat

Duration of exposure : 90 days

OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)

Aspiration hazard:

Methylal: Not considered hazardous.

Butane/Isobutane/Propane: Not applicable to gases and gas mixtures.

Propane-1,2-diol: Hot vapours can cause lung damage.

2,2',2"-Nitrilotriethanol: No data available.

Diethanolamine: Not applicable.

11.1.2. Mixture

No toxicological data available for the mixture.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

12.1.1. Substances

2,2',2"-NITRILOTRIETHANOL (CAS: 102-71-6)

Fish toxicity: LC50 > 10000 mg/l

Species : Leuciscus idus Duration of exposure : 48 h

Crustacean toxicity: EC50 = 609.88 mg/l

Species : Ceriodaphnia dubia Duration of exposure : 48 h

NOEC = 16 mg/l Species : Daphnia magna Duration of exposure : 21 days

OECD Guideline 211 (Daphnia magna Reproduction Test)

Algae toxicity: ECr50 = 512 mg/l

Species: Desmodesmus subspicatus

Duration of exposure : 72 h

PROPANE-1,2-DIOL (CAS: 57-55-6)

Fish toxicity: LC50 = 51600 mg/l

Species : Oncorhynchus mykiss Duration of exposure : 96 h

OECD Guideline 203 (Fish, Acute Toxicity Test)

Crustacean toxicity: EC50 = 43500 mg/l

Species: Daphnia magna

Duration of exposure: 48 h

OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)

Algae toxicity: ECr50 = 19000 mg/l

Species: Pseudokirchnerella subcapitata

Duration of exposure: 72 h

OECD Guideline 201 (Alga, Growth Inhibition Test)

DIETHANOLAMINE (CAS: 111-42-2)

Fish toxicity: LC50 = 1460 mg/l

Species : Pimephales promelas Duration of exposure : 96 h

NOEC > 1 mg/1

Crustacean toxicity: EC50 = 55 mg/l

Species : Daphnia magna Duration of exposure : 48 h

EC10 mg/l

Species : Daphnia magna Duration of exposure : 21 days

Algae toxicity: ECr50 = 19 mg/l

Species: Pseudokirchnerella subcapitata

Duration of exposure: 96 h

METHYLAL (CAS: 109-87-5)

Fish toxicity: LC50 > 1000 mg/l

Species : Danio rerio Duration of exposure : 96 h

OECD Guideline 203 (Fish, Acute Toxicity Test)

Crustacean toxicity: EC50 > 1000 mg/l

Species : Daphnia magna Duration of exposure : 48 h

OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)

12.1.2. Mixtures

No aquatic toxicity data available for the mixture.

12.2. Persistence and degradability

Butane/Isobutane/Propane: Expected to be readily biodegradable.

12.2.1. Substances

DIETHANOLAMINE (CAS: 111-42-2)

Biodegradability: Rapidly degradable.

DBO5/DCO = 0.93

2,2',2"-NITRILOTRIETHANOL (CAS: 102-71-6)

Biodegradability: Rapidly degradable.

DBO5/DCO = 1

PROPANE (CAS: 74-98-6)

Biodegradability: Rapidly degradable.

BUTANE (< 0,1 % 1,3-BUTADIENE) (CAS: 106-97-8)

Biodegradability: Rapidly degradable.

METHYLAL (CAS: 109-87-5)

Biodegradability: Non-rapidly degradable.

PROPANE-1,2-DIOL (CAS: 57-55-6)

Biodegradability: Rapidly degradable.

12.3. Bioaccumulative potential

Butane/Isobutane/Propane: Not expected to be dangerous for the aquatic environment.

Methylal: No data available.

Propane-1,2-diol: Bioaccumulation not expected. 2,2',2"-Nitrilotriethanol: Bioaccumulation not expected.

Diethanolamine: Bioaccumulation is unlikely.

12.3.1. Substances

PROPANE-1,2-DIOL (CAS: 57-55-6)

Bioaccumulation: BCF = 0.09

DIETHANOLAMINE (CAS: 111-42-2)

Octanol/water partition coefficient : log Koe = 2.46

OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)

2,2',2"-NITRILOTRIETHANOL (CAS: 102-71-6)

Octanol/water partition coefficient : log Koe = 2.3

Bioaccumulation: BCF < 3.9

Species: Cyprinus carpio (Fish)

OECD Guideline 305 (Bioconcentration: Flow-through Fish Test)

12.4. Mobility in soil

Butane/Isobutane/Propane: If released into the environment, the product will rapidly disperse into the atmosphere where it will undergo photochemical degradation.

Methylal: No data available.

Propane-1,2-diol: Low adsorption capacity in the soil.

2,2',2"-Nitrilotriethanol: The product is water soluble. Low volatility liquid. Mobile in the soil.

Diethanolamine: The product is water soluble. Particularly mobile in soil types. Not expected to adsorb to soil.

12.5. Results of PBT and vPvB assessment

Methylal: PBT/vPvB: No.

Butane/Isobutane/Propane: Not considered to be a PBT or a vPvB.

Propane-1,2-diol: PBT/vPvB: No. 2,2',2"-Nitrilotriethanol: PBT/vPvB: No. Diethanolamine: PBT/vPvB: No.

12.6. Endocrine disrupting properties

No data available.

12.7. Other adverse effects

Diethanolamine: Do not flush into surface water or sanitary sewer system. Avoid penetrating into the soil.

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.

Recycle or dispose of waste in complaince with current legislation, namely the Ordinance on the Avoidance and Disposal of Waste (Waste Ordinance, VVEA, SR 814.600), the Ordinance on Waste from June 22, 2005 (VeVA, SR 814, 610) and DETEC Ordinance on Waste Lists.

Disposal of the product (the unused product, residual quantities, the cured product, emptied but uncleaned packaging): preferably by an approved waste collector or a specialist disposal company. Suitable containers and methods of waste treatment should be used.

Soiled packaging:

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

Codes of wastes (Decision 2014/955/EC, Directive 2008/98/EEC on hazardous waste):

15 01 10 * packaging containing residues of or contaminated by dangerous substances

SECTION 14: TRANSPORT INFORMATION

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2021 - IMDG 2020 - ICAO/IATA 2021).

14.1. UN number or ID number

1950

14.2. UN proper shipping name

UN1950=AEROSOLS, asphyxiant

14.3. Transport hazard class(es)

- Classification:

2.2

ADR/RID Label: Limited Quantity: 2.2 is not applicable.

14.4. Packing group

•

14.5. Environmental hazards

14.6. Special precautions for user

| ADR/RID | Class | Code | Pack gr. | Label | Ident. | LQ | Provis. | EQ | Cat. | Tunnel |
|---------|-------|------|----------|-------|--------|-----|-------------|----|------|--------|
| | 2 | 5A | - | 2.2 | - | 1 L | 190 327 344 | E0 | 3 | Е |
| | | | | | | | 625 | | | |

| IMDG | Class | 2°Label | Pack gr. | LQ | EMS | Provis. | EQ | Stowage | Segregation |
|------|-------|----------|----------|-----------|----------|-------------|--------|------------|-------------|
| | | | | | | | | Handling | |
| | 2 | See SP63 | - | See SP277 | F-D. S-U | 63 190 277 | E0 | - SW1 SW22 | SG69 |
| | | | | | | 327 344 381 | | | |
| | | | | | | 959 | | | |
| IATA | Class | 2°Label | Pack gr. | Passager | Passager | Cargo | Cargo | note | EQ |
| | 2.2 | - | - | 203 | 75 kg | 203 | 150 kg | A98 A145 | E0 |
| | | | | | | | | A167 A802 | |
| | 2.2 | - | - | Y203 | 30 kg G | - | - | A98 A145 | E0 |
| | | | | | | | | A167 A802 | |

For limited quantities, see part 2.7 of the OACI/IATA and chapter 3.4 of the ADR and IMDG.

For excepted quantities, see part 2.6 of the OACI/IATA and chapter 3.5 of the ADR and IMDG.

14.7. Maritime transport in bulk according to IMO instruments

No data available.

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

A chemical safety assessment has been carried out for the following products or for the substances in these products:

Methylal

Propane-1,2-diol

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.

H280 Contains gas under pressure; may explode if heated.

H302 Harmful if swallowed.
 H315 Causes skin irritation.
 H318 Causes serious eye damage.

H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.
H373 May cause damage to organs through prolonged or repeated exposure.

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 CMR: Carcinogenic, mutagenic or reprotoxic.

STEL : Short-term exposure limit TWA : Time Weighted Averages

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).

PBT: Persistent, bioaccumulable and toxic. vPvB: Very persistent, very bioaccumulable. SVHC: Substances of very high concern.