

LEAFSHINE - BL022428-EN



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 : LEAFSHINE
Product code : BL022428-EN.

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

Houseplant Leafshine gives long-lasting glossy sheen for thick and glossy leafed houseplants. 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 1 (Aerosol 1, H222 - H229).

Hazardous to the aquatic environment - Chronic hazard, Category 4 (Aquatic Chronic 4, H413).

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

The propellant gas is not taken into account when determining the health and environmental classification of the mixture.

2.2. Label elements

Mixture for aerosol application.

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

Hazard pictograms :



GHS02

Signal Word :

DANGER

Hazard statements :

H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H413	May cause long lasting harmful effects to aquatic life.

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.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.

Precautionary statements - Storage :

P410 + P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C.
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Precautionary statements - Disposal :

P501

Dispose of container to an approved waste disposal plant.

2.3. Other hazards

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC) $\geq 0.1\%$ 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 contain substances $\geq 0.1\%$ 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	%
EC: 918-167-1 REACH: 01-2119472146-39 HYDROCARBONS, C11-C12, ISOALKANES, < 2 % AROMATICS	GHS08, GHS02 Dgr Flam. Liq. 3, H226 Asp. Tox. 1, H304 Aquatic Chronic 4, H413 EUH:066		25 \leq x % < 50
CAS: 106-97-8 EC: 203-448-7 REACH: 01-2119474691-32-XXXX BUTANE (< 0,1 % 1,3-BUTADIENE)	GHS02 Dgr Flam. Gas 1, H220 Press. Gas, H280	C [1] [7]	10 \leq x % < 25
CAS: 74-98-6 EC: 200-827-9 REACH: 01-2119486944-21-XXXX PROPANE	GHS02 Dgr Flam. Gas 1, H220 Press. Gas, H280	[1] [7]	10 \leq x % < 25
CAS: 8042-47-5 EC: 232-455-8 REACH: 01-2119487078-27 WHITE MINERAL OIL (PETROLEUM)	GHS08 Dgr Asp. Tox. 1, H304		10 \leq x % < 25
CAS: 67-63-0 EC: 200-661-7 REACH: 01-2119457558-25 PROPAN-2-OL	GHS07, GHS02 Dgr Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336	[1]	2.5 \leq x % < 10

Specific concentration limits:

Identification	Specific concentration limits	ATE
CAS: 67-63-0 EC: 200-661-7 REACH: 01-2119457558-25 PROPAN-2-OL		inhalation: ATE = 30 mg/l 4h (vapours) dermal: ATE = 13900 mg/kg BW oral: ATE = 5840 mg/kg BW

Information on ingredients :

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

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

[7] Propellant gas

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.

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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

Flammable.

Chemical powders, carbon dioxide and other extinguishing gas are suitable for small fires.

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

Prevent the effluent of fire-fighting measures from entering drains or waterways.

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

Fire-fighting personnel are to be equipped with autonomous insulating breathing apparatus.

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 non first aid worker

Because of the organic solvents contained in the mixture, eliminate sources of ignition and ventilate the area.

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.

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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.

Vapours are heavier than air. They can spread along the ground and form mixtures that are explosive with air.

Prevent the formation of flammable or explosive concentrations in air and avoid vapor concentrations higher than the occupational exposure limits.

Do not spray on a naked flame or any incandescent material.

Do not pierce or burn, even after use.

Use the mixture in premises free of naked flames or other sources of ignition and ensure that electrical equipment is suitably protected.

Keep packages tightly closed and away from sources of heat, sparks and naked flames.

Do not use tools which may produce sparks. Do not smoke.

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.

Keep away from all sources of ignition - do not smoke.

Keep well away from all sources of ignition, heat and direct sunlight.

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.

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 :

- Ireland (Code of practice for the Chemical Agents Regulations, 2021) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
106-97-8		1000 ppm			
74-98-6				Asphx.	
67-63-0	200 ppm	400 ppm		Sk	

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

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
106-97-8	600 ppm	750 ppm		Carc	
	1450 mg/m3	1810 mg/m3			

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67-63-0	400 ppm 999 mg/m ³	500 ppm 1250 mg/m ³			
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Hydrocarbons, C11-C12, isoalkanes, < 2 % aromatics : AGW (DE) : 300 mg/m³ (8 h)

White mineral oil (petroleum) : ACGIH STEL/VLE-mg/m³ : 10; VME-mg/m³ : 5

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

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

Final use:

Exposure method:
Potential health effects:
DNEL :

Workers.

Dermal contact.
Long term systemic effects.
888 mg/kg body weight/day

Exposure method:
Potential health effects:
DNEL :

Inhalation.
Long term systemic effects.
500 mg of substance/m³

Final use:

Exposure method:
Potential health effects:
DNEL :

Consumers.

Ingestion.
Long term systemic effects.
26 mg/kg body weight/day

Exposure method:
Potential health effects:
DNEL :

Dermal contact.
Long term systemic effects.
319 mg/kg body weight/day

Exposure method:
Potential health effects:
DNEL :

Inhalation.
Long term systemic effects.
89 mg of substance/m³

WHITE MINERAL OIL (PETROLEUM) (CAS: 8042-47-5)

Final use:

Exposure method:
Potential health effects:
DNEL :

Workers.

Dermal contact.
Long term systemic effects.
220 mg/kg body weight/day

Exposure method:
Potential health effects:
DNEL :

Inhalation.
Long term systemic effects.
160 mg of substance/m³

Final use:

Exposure method:
Potential health effects:
DNEL :

Consumers.

Ingestion.
Long term systemic effects.
40 mg/kg body weight/day

Exposure method:
Potential health effects:
DNEL :

Dermal contact.
Long term systemic effects.
92 mg/kg body weight/day

Exposure method:
Potential health effects:
DNEL :

Inhalation.
Long term systemic effects.
35 mg of substance/m³

Predicted no effect concentration (PNEC):

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

Environmental compartment:
PNEC :

Soil.
28 mg/kg

Environmental compartment:
PNEC :

Fresh water.
140.9 mg/l

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Environmental compartment: PNEC :	Sea water. 140.9 mg/l
Environmental compartment: PNEC :	Intermittent waste water. 140.9 mg/l
Environmental compartment: PNEC :	Fresh water sediment. 552 mg/kg
Environmental compartment: PNEC :	Marine sediment. 552 mg/kg
Environmental compartment: PNEC :	Waste water treatment plant. 2251 mg/l

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

Type of gloves recommended :

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

- PVA (Polyvinyl alcohol)

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.
Spray.

Colour

Colourless, clear

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Odour

Odour threshold : Not stated.
Odour : Propane-2-ol

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 : Extremely flammable

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.

pH

pH (aqueous solution) : Not stated.
pH : Not relevant.

Kinematic viscosity

Viscosity : Not stated.

Solubility

Water solubility : Insoluble.
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 : 0.645

Relative vapour density

Vapour density : Not stated.

9.2. Other information

VOC (g/l) : 532.13
Pressure at 20°C : ± 4.0 bar
Pressure at 50°C : < 10 bar
Water content : < 0.3 % w/w

9.2.1. Information with regard to physical hazard classes

No data available.

Aerosols

Chemical combustion heat : ≥ 30 kJ/g.

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.

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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

Any apparatus likely to produce a flame or to have a metallic surface at high temperature (burners, electric arcs, furnaces etc.) must not be allowed on the premises.

Avoid :

- heat
- flames and hot surfaces
- frost

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

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

Oral route : LD50 = 5840 mg/kg
Species : Rat
OECD Guideline 401 (Acute Oral Toxicity)

Dermal route : LD50 = 13900 mg/kg
Species : Rabbit
OECD Guideline 402 (Acute Dermal Toxicity)

Inhalation route (Vapours) : LC50 = 30 mg/l
Species : Rat
OECD Guideline 403 (Acute Inhalation Toxicity)
Duration of exposure : 4 h

WHITE MINERAL OIL (PETROLEUM) (CAS: 8042-47-5)

Oral route : LD50 > 5000 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 > 5 mg/l
Species : Rat
OECD Guideline 403 (Acute Inhalation Toxicity)

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Duration of exposure : 4 h

HYDROCARBONS, C11-C12, ISOALKANES, < 2 % AROMATICS

Oral route : LD50 > 5000 mg/kg
Species : Rat
OECD Guideline 401 (Acute Oral Toxicity)

Dermal route : LD50 > 5000 mg/kg
Species : Rabbit
OECD Guideline 402 (Acute Dermal Toxicity)

Inhalation route (Dusts/mist) : LC50 > 5.6 mg/l
Species : Rat
OECD Guideline 403 (Acute Inhalation Toxicity)
Duration of exposure : 4 h

Skin corrosion/skin irritation :

Hydrocarbons, C11-C12, isoalkanes, < 2 % aromatics : Not classified as skin corrosive/irritant but marked with EUH066.

Propan-2-ol : Repeated exposure may cause skin dryness or cracking.

White mineral oil (petroleum) : Negligible irritation to skin at ambient temperatures.

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

WHITE MINERAL OIL (PETROLEUM) (CAS: 8042-47-5)

Irritation : Average score = 0
Effect observed : Overall irritation score
Species : Rabbit
Duration of exposure : 24 h
OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

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

OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

HYDROCARBONS, C11-C12, ISOALKANES, < 2 % AROMATICS

OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

Serious damage to eyes/eye irritation :

Hydrocarbons, C11-C12, isoalkanes, < 2 % aromatics : Not classified as damaging or irritant to eyes.

Propan-2-ol : Causes serious eye irritation.

White mineral oil (petroleum) : May cause mild, short-lasting discomfort to eyes.

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

WHITE MINERAL OIL (PETROLEUM) (CAS: 8042-47-5)

Corneal haze : Average score = 0
Species : Rabbit
Duration of exposure : 72 h
OECD Guideline 405 (Acute Eye Irritation / Corrosion)

Iritis : Average score = 0
Species : Rabbit
Duration of exposure : 72 h
OECD Guideline 405 (Acute Eye Irritation / Corrosion)

Conjunctival redness : Average score = 0.22
Species : Rabbit
Duration of exposure : 72 h
OECD Guideline 405 (Acute Eye Irritation / Corrosion)

HYDROCARBONS, C11-C12, ISOALKANES, < 2 % AROMATICS

Corneal haze : Average score = 0
Species : Rabbit
Duration of exposure : 72 h

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	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
Iritis :	Average score = 0 Species : Rabbit Duration of exposure : 72 h OECD Guideline 405 (Acute Eye Irritation / Corrosion)
Conjunctival redness :	Average score = 0 Species : Rabbit Duration of exposure : 72 h OECD Guideline 405 (Acute Eye Irritation / Corrosion)
Conjunctival oedema :	Average score = 0 Species : Rabbit Duration of exposure : 72 h OECD Guideline 405 (Acute Eye Irritation / Corrosion)

Respiratory or skin sensitisation :

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

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

Buehler Test : Non-sensitiser.
Species : Guinea pig
OECD Guideline 406 (Skin Sensitisation)

WHITE MINERAL OIL (PETROLEUM) (CAS: 8042-47-5)

Guinea Pig Maximisation Test (GMPT) : Non-sensitiser.
Species : Guinea pig
OECD Guideline 406 (Skin Sensitisation)

HYDROCARBONS, C11-C12, ISOALKANES, < 2 % AROMATICS

Guinea Pig Maximisation Test (GMPT) : Non-sensitiser.
Species : Guinea pig
OECD Guideline 406 (Skin Sensitisation)

Germ cell mutagenicity :

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

No mutagenic effect.

Mutagenesis (in vivo) : Negative.
Species : Mouse
OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)

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

WHITE MINERAL OIL (PETROLEUM) (CAS: 8042-47-5)

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 476 (In vitro Mammalian Cell Gene Mutation Test)

PROPANE (CAS: 74-98-6)

No mutagenic effect.

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

No mutagenic effect.

HYDROCARBONS, C11-C12, ISOALKANES, < 2 % AROMATICS

No mutagenic effect.

Mutagenesis (in vivo) :

Negative.

Species : Rat

OECD Guideline 478 (Genetic Toxicology: Rodent Dominant Lethal Test)

Mutagenesis (in vitro) :

Negative.

Species : Bacteria

OECD Guideline 471 (Bacterial Reverse Mutation Assay)

Species : S. typhimurium TA102

Carcinogenicity :

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

Carcinogenicity Test :

Negative.

No carcinogenic effect.

Species : Mouse

OECD Guideline 451 (Carcinogenicity Studies)

WHITE MINERAL OIL (PETROLEUM) (CAS: 8042-47-5)

Carcinogenicity Test :

Negative.

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.

HYDROCARBONS, C11-C12, ISOALKANES, < 2 % AROMATICS

Carcinogenicity Test :

Negative.

No carcinogenic effect.

OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)

Reproductive toxicant :

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

No toxic effect for reproduction

Study on fertility :

Species : Rat

OECD Guideline 414 (Prenatal Developmental Toxicity Study)

Study on development :

Species : Rat

OECD Guideline 416 (Two-Generation Reproduction Toxicity Study)

WHITE MINERAL OIL (PETROLEUM) (CAS: 8042-47-5)

No toxic effect for reproduction

Study on fertility :

Species : Rat

OECD Guideline 414 (Prenatal Developmental Toxicity Study)

Study on development :

Species : Rat

OECD Guideline 415 (One-Generation Reproduction Toxicity Study)

PROPANE (CAS: 74-98-6)

LEAFSHINE - BL022428-EN

No toxic effect for reproduction

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

No toxic effect for reproduction

HYDROCARBONS, C11-C12, ISOALKANES, < 2 % AROMATICS

No toxic effect for reproduction

Study on fertility :

Species : Rat

OECD Guideline 414 (Prenatal Developmental Toxicity Study)

Study on development :

Species : Rat

OECD Guideline 421 (Reproduction / Developmental Toxicity Screening Test)

Specific target organ systemic toxicity - single exposure :

Propan-2-ol : To human : Vapours may cause drowsiness and dizziness.

Hydrocarbons, C11-C12, isoalkanes, < 2 % aromatics : Not classified as toxic to a target organ.

White mineral oil (petroleum) : Not likely to cause organ damage.

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

Specific target organ systemic toxicity - repeated exposure :

Propan-2-ol : To human : Not classified for organ toxicity. By male rats : The product can affect the kidneys and liver, resulting in functional disturbances.

Hydrocarbons, C11-C12, isoalkanes, < 2 % aromatics : Not classified as toxic to a target organ.

White mineral oil (petroleum) : Not likely to cause organ damage.

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

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

Oral route :

C = 900 mg/kg bodyweight/day

Species : Rat

Duration of exposure : 90 days

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

WHITE MINERAL OIL (PETROLEUM) (CAS: 8042-47-5)

Oral route :

C >= 1200 mg/kg bodyweight/day

Species : Rat

Duration of exposure : 90 days

OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)

OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study)

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

HYDROCARBONS, C11-C12, ISOALKANES, < 2 % AROMATICS

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

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

Aspiration hazard :

Hydrocarbons, C11-C12, isoalkanes, < 2 % aromatics : In case of swallowing or vomiting product can enter airways and can cause chemical pneumonitis and pulmonary oedema.

Propan-2-ol : Aspiration into the lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal.

White mineral oil (petroleum) : May be fatal if swallowed and enters airways.

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

11.1.2. Mixture

No toxicological data available for the mixture.

11.2. Information on other hazards

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SECTION 12 : ECOLOGICAL INFORMATION

May cause long lasting harmful effects to aquatic life.

The product must not be allowed to run into drains or waterways.

12.1. Toxicity

12.1.1. Substances

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

Fish toxicity :

LC50 = 9640 mg/l

Species : Pimephales promelas

Duration of exposure : 96 h

OECD Guideline 203 (Fish, Acute Toxicity Test)

Crustacean toxicity :

EC50 = 9714 mg/l

Species : Daphnia magna

Duration of exposure : 24 h

OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)

Algae toxicity :

ECr50 > 100 mg/l

Species : Scenedesmus subspicatus

Duration of exposure : 72 h

EC50 mg/l

Species : Scenedesmus subspicatus

Duration of exposure : 72 h

NOEC = 1000 mg/l

Species : Scenedesmus subspicatus

Duration of exposure : 7 days

HYDROCARBONS, C11-C12, ISOALKANES, < 2 % AROMATICS

Fish toxicity :

LC50 > 1000 mg/l

Species : Oncorhynchus mykiss

Duration of exposure : 96 h

OECD Guideline 203 (Fish, Acute Toxicity Test)

NOEC = 0.209 mg/l

Species : Oncorhynchus mykiss

Duration of exposure : 28 days

Crustacean toxicity :

EC50 > 1000 mg/l

Species : Daphnia magna

Duration of exposure : 48 h

OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)

NOEC > 1 mg/l

Species : Daphnia magna

Duration of exposure : 21 days

OECD Guideline 211 (Daphnia magna Reproduction Test)

Algae toxicity :

ECr50 > 1000 mg/l

Species : Pseudokirchnerella subcapitata

Duration of exposure : 72 h

OECD Guideline 201 (Alga, Growth Inhibition Test)

WHITE MINERAL OIL (PETROLEUM) (CAS: 8042-47-5)

Fish toxicity :

LC50 > 400000 mg/l

Species : Oncorhynchus mykiss

Duration of exposure : 96 h

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Crustacean toxicity :	EC50 > 500000 mg/l Species : Mysidopsis bahia Duration of exposure : 48 h
	NOEC > 10 mg/l Species : Daphnia magna Duration of exposure : 21 days
Algae toxicity :	ECr50 = 100 mg/l Species : Pseudokirchnerella subcapitata Duration of exposure : 72 h
	NOEC = 100 mg/l Species : Pseudokirchnerella subcapitata Duration of exposure : 72 h

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.

Hydrocarbons, C11-C12, isoalkanes, < 2 % aromatics : Inherently biologically degradable. Transformation due to hydrolysis and due to photolysis is not expected to be significant. Expected to degrade rapidly in air.

White mineral oil (petroleum) : Inherently biodegradable.

12.2.1. Substances

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

Biodegradability : Rapidly degradable.
DBO5/DCO = 0.53

WHITE MINERAL OIL (PETROLEUM) (CAS: 8042-47-5)

Biodegradability : Rapidly degradable.

PROPANE (CAS: 74-98-6)

Biodegradability : Rapidly degradable.

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

Biodegradability : Rapidly degradable.

HYDROCARBONS, C11-C12, ISOALKANES, < 2 % AROMATICS

Biodegradability : Non-rapidly degradable.
DBO5/DCO = 0.31

12.3. Bioaccumulative potential

Propan-2-ol : No bioaccumulation.

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

Hydrocarbons, C11-C12, isoalkanes, < 2 % aromatics : Not determined.

White mineral oil (petroleum) : Has the potential to bioaccumulate, however metabolism or physical properties may reduce the bioconcentration or limit bioavailability.

12.3.1. Substances

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

Octanol/water partition coefficient : log K_{ow} = 0.05
OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)

WHITE MINERAL OIL (PETROLEUM) (CAS: 8042-47-5)

Octanol/water partition coefficient : log K_{ow} = 3.5

12.4. Mobility in soil

Propan-2-ol : Expected to remain in water or migrate through soil.

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

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Hydrocarbons, C11-C12, isoalkanes, < 2 % aromatics : Leaking material can soak in the sediment layer and cause soil and groundwater contamination.

White mineral oil (petroleum) : Low solubility, floats and is expected to migrate from water to the land. Expected to partition to sediment and wastewater solids. Low potential to migrate through soil.

12.5. Results of PBT and vPvB assessment

Propan-2-ol : PBT/vPvB : No.

Hydrocarbons, C11-C12, isoalkanes, < 2 % aromatics : PBT/vPvB : No.

White mineral oil (petroleum) : PBT/vPvB : No.

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

12.6. Endocrine disrupting properties

Hydrocarbons, C11-C12, isoalkanes, < 2 % aromatics : This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

Propan-2-ol : No information available about endocrine disrupting properties for the environment.

Butane/Isobutane/Propane : Not applicable.

12.7. Other adverse effects

Propan-2-ol : Do not flush into surface water or sanitary sewer system. Avoid penetrating into the soil.

Hydrocarbons, C11-C12, isoalkanes, < 2 % aromatics : Flowing product can lead to an accumulation of a film on the water surface that reduces the oxygen exchange and can lead to the death of organisms.

Butane/Isobutane/Propane : Not applicable.

White mineral oil (petroleum) : No harmful effects are expected.

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 compliance 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 [40-20] - ICAO/IATA 2022 [63]).

14.1. UN number or ID number

1950

14.2. UN proper shipping name

UN1950=AEROSOLS, flammable

14.3. Transport hazard class(es)

- Classification :

2.1

ADR/RID Label : Limited Quantity : 2.1 is not applicable.

14.4. Packing group

-

14.5. Environmental hazards

-

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14.6. Special precautions for user

ADR/RID	Class	Code	Pack gr.	Label	Ident.	LQ	Provis.	EQ	Cat.	Tunnel
	2	5F	-	2.1	-	1 L	190 327 344 625	E0	2	D
IMDG	Class	2°Label	Pack gr.	LQ	EMS	Provis.	EQ	Stowage Handling	Segregation	
	2	See SP63	-	See SP277	F-D. S-U	63 190 277 327 344 381 959	E0	- SW1 SW22	SG69	
IATA	Class	2°Label	Pack gr.	Passager	Passager	Cargo	Cargo	note	EQ	
	2.1	-	-	203	75 kg	203	150 kg	A145 A167 A802	E0	
	2.1	-	-	Y203	30 kg G	-	-	A145 A167 A802	E0	

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. 2022/692 (ATP 18)

- Container information:

No data available.

-Restrictions applied under Title VIII of Regulation (EC) No. 1907/2006 (REACH):

The mixture does not contain any substance restricted under Annex XVII of Regulation (EC) No. 1907/2006 (REACH):
<https://echa.europa.eu/substances-restricted-under-reach>.

- 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 :

Propan-2-ol

Hydrocarbons, C11-C12, isoalkanes, < 2 % aromatics

White mineral oil (petroleum)

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 :

H220	Extremely flammable gas.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H280	Contains gas under pressure; may explode if heated.
H304	May be fatal if swallowed and enters airways.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H413	May cause long lasting harmful effects to aquatic life.
EUH066	Repeated exposure may cause skin dryness or cracking.

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.

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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
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 : Wassergefährdungsklasse (Water Hazard Class).
GHS02 : Flame
PBT: Persistent, bioaccumulable and toxic.
vPvB : Very persistent, very bioaccumulable.
SVHC : Substances of very high concern.

Difference Report

Revision: N°4 (13/03/2023) / GHS n°4 / HCS n° / Version: N°1 (13/03/2023)

~~Revision: N°3 (09/12/2021) / GHS n°3 / HCS n° / Version: N°1 (09/12/2021)~~

SECTION 2 : HAZARDS IDENTIFICATION

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

The propellant gas is not taken into account when determining the health and environmental classification of the mixture.

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

Composition :

EC: 918-167-1 REACH: 01-2119472146-39 HYDROCARBONS, C11-C12, ISOALKANES, < 2 % AROMATICS	GHS08, GHS02 Dgr Flam. Liq. 3, H226 Asp. Tox. 1, H304 Aquatic Chronic 4, H413 EUH:066		50 <= x % < 100
CAS: 8042-47-5 EC: 232-455-8 REACH: 01-2119487078-27 WHITE MINERAL OIL (PETROLEUM)	GHS08 Dgr Asp. Tox. 1, H304		25 <= x % < 50
EC: 918-167-1 REACH: 01-2119472146-39 HYDROCARBONS, C11-C12, ISOALKANES, < 2 % AROMATICS	GHS08, GHS02 Dgr Flam. Liq. 3, H226 Asp. Tox. 1, H304 Aquatic Chronic 4, H413 EUH:066		25 <= x % < 50
CAS: 8042-47-5 EC: 232-455-8 REACH: 01-2119487078-27 WHITE MINERAL OIL (PETROLEUM)	GHS08 Dgr Asp. Tox. 1, H304		10 <= x % < 25

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SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

Physical state

Spray.

SECTION 12 : ECOLOGICAL INFORMATION

12.6. Endocrine disrupting properties

~~No data available.~~

Hydrocarbons, C11-C12, isoalkanes, < 2 % aromatics : This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

Propan-2-ol : No information available about endocrine disrupting properties for the environment.

Butane/Isobutane/Propane : Not applicable.

12.7. Other adverse effects

~~No data available.~~

Propan-2-ol : Do not flush into surface water or sanitary sewer system. Avoid penetrating into the soil.

Hydrocarbons, C11-C12, isoalkanes, < 2 % aromatics : Flowing product can lead to an accumulation of a film on the water surface that reduces the oxygen exchange and can lead to the death of organisms.

Butane/Isobutane/Propane : Not applicable.

White mineral oil (petroleum) : No harmful effects are expected.

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).~~

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 [40-20] - ICAO/IATA 2022 [63]).

SECTION 15: Regulatory information

- Classification and labelling information included in section 2:

~~-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)~~

- EU Regulation No. 1272/2008 amended by EU Regulation No. 2022/692 (ATP 18)

-Restrictions applied under Title VIII of Regulation (EC) No. 1907/2006 (REACH):

The mixture does not contain any substance restricted under Annex XVII of Regulation (EC) No. 1907/2006 (REACH):
<https://echa.europa.eu/substances-restricted-under-reach>.