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Revision: N°4 (13/07/2015)

SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 2015/830)

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

1.1. Product identifier

Product name: LEAFSHINE (B/P)
Product code: 11836-10083-10594-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: Spring From Holland BV.

Address: C. Verolmeweg 12-14.2171 KV.Sassenheim.Netherlands.

Telephone: +31 252 231651 Fax: +31 252 231469.

info@springfromholland.nl http://www.springfromholland.com

1.4. Emergency telephone number: +31 252 231651

Association/Organisation: http://www.springfromholland.com

Hours of operation: Monday - Thursday: 8:00-17:00; Friday: 8:00-15:00

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).

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.

Hazard pictograms:



GHS02

Signal Word : DANGER

Hazard statements:

H222 Extremely flammable aerosol.

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.

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.

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

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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:

Composition:			
Identification	(EC) 1272/2008	Note	%
EC: 918-167-1	GHS08, GHS02		$25 \le x \% < 50$
REACH: 01-2119472146-39	Dgr		
	Flam. Liq. 3, H226		
HYDROCARBONS, C11-C12, ISOALKANES,	Asp. Tox. 1, H304		
< 2 % AROMATICS	EUH:066		
CAS: 106-97-8	GHS02	С	10 <= x % < 25
EC: 203-448-7	Dgr	[1]	
REACH: 01-2119474691-32	Flam. Gas 1, H220	[7]	
	Press. Gas, H280		
BUTANE (< 0,1 % 1,3-BUTADIENE)			
CAS: 64742-56-9	GHS08		10 <= x % < 25
EC: 265-159-2	Dgr		
REACH: 01-2119480132-48	Asp. Tox. 1, H304		
DISTILLATES (PETROLEUM),			
SOLVENT-DEWAXED LIGHT PARAFFINIC			
CAS: 67-63-0	GHS07, GHS02	[1]	2.5 <= x % < 10
EC: 200-661-7	Dgr		
REACH: 01-2119457558-25	Flam. Liq. 2, H225		
	Eye Irrit. 2, H319		
PROPAN-2-OL	STOT SE 3, H336		

Information on ingredients:

- [7] Propellant gas
- [1] Substance for which maximum workplace exposure limits are available.

SECTION 4: FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing by an unconscious person.

4.1. Description of first aid measures

In the event of 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 soft, 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

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.

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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 on 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.

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.

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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.

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, 2007) :

CAS	TWA:	STEL:	Ceiling:	Definition:	Criteria:
106-97-8	600 ppm	750 ppm	-	-	-
67-63-0	400 ppm	500 ppm	-	-	-

Hydrocarbons, C11-C12, isoalkanes, < 2 % aromatics : AGW (DE) : 600 mg/m³ (8 h)

Distillates (petroleum), solvent-dewaxed light paraffinic: TWA TLV (ACGIH): 5 mg/m³ (8 h); STEL: 10 mg/m³ (15 min)

- Ireland (Code of practice for the safety, Health and Welfare at Work, 2010):

CAS	TWA:	STEL:	Ceiling:	Definition:	Criteria:
106-97-8	600 ppm	750 ppm	-	-	-
67-63-0	400 ppm	500 ppm	_	_	_

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

Final use: Workers.
Exposure method: Dermal contact.

Potential health effects: Long term systemic effects.

DNEL: 888 mg/kg body weight/day

Exposure method: Inhalation.

Potential health effects: Long term systemic effects.

DNEL: 500 mg of substance/m3

Final use: Consumers.

Exposure method: Ingestion.

Potential health effects: Long term systemic effects.

DNEL: 26 mg/kg body weight/day

Exposure method: Dermal contact.

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

Exposure method: Inhalation.

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

Predicted no effect concentration (PNEC):

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

Environmental compartment: Soil. PNEC: 28 mg/kg

Environmental compartment: Fresh water. PNEC: 140.9 mg/l

Environmental compartment: Sea water. PNEC: 140.9 mg/l

Environmental compartment: Intermittent waste water.

PNEC: 140.9 mg/l

Environmental compartment: Fresh water sediment.

PNEC: 552 mg/kg

Environmental compartment: Marine sediment. PNEC: 552 mg/kg

Environmental compartment: Waste water treatment plant.

PNEC: 2251 mg/l

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:

- Nitrile rubber (butadiene-acrylonitrile copolymer rubber (NBR))
- PVA (Polyvinyl alcohol)
- Natural latex
- Butyl Rubber (Isobutylene-isoprene copolymer)
- Viton® (Hexafluoropropylene copolymer and vinylidene fluoride)

Recommended properties:

- Impervious gloves in accordance with standard EN374

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

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- Body protection

Suitable type of protective clothing:

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

In the event of a risk of splashing, wear protective clothing against chemical risks (type 6) in accordance with EN13034 to prevent skin contact.

Work clothing worn by personnel shall be laundered regularly.

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

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

General information:

Physical state: Fluid liquid.

Spray.

Color: Colourless, clear Odour: Propane-2-ol

Important health, safety and environmental information

Not relevant. pH: Vapour pressure (50°C): Not relevant. Density: 0.667 Water solubility: Insoluble. Chemical combustion heat: Not specified. Inflammation time: Not specified. Deflagration density: Not specified. Inflammation distance: Not specified. Flame height: Not specified. Flame duration: Not specified.

Flash point : $$<0\,^{\circ}\text{C}$$ Flammability : Extremely flammable

9.2. Other information

 VOC (g/l):
 550.27

 Pressure at 20° C:
 ± 4.0 bar

 Pressure at 50° C:
 < 10 bar

 Water content:
 < 0.3% w/w

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.

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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.

- 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 appear.

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 toxicological effects

Splashes in the eyes may cause irritation and reversible damage

11.1.1. Substances

Acute toxicity:

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

Inhalation route: LC50 > 10 mg/l

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

LD50 = 5840 mg/kgOral route:

Species: Rat

OECD Guideline 401 (Acute Oral Toxicity)

Dermal route: LD50 = 13900 mg/kg

Species: Rabbit

OECD Guideline 402 (Acute Dermal Toxicity)

LC50 > 25000 mg/m3 Inhalation route:

Species: Rat

OECD Guideline 403 (Acute Inhalation Toxicity)

DISTILLATES (PETROLEUM), SOLVENT-DEWAXED LIGHT PARAFFINIC (CAS: 64742-56-9)

Oral route: LD50 > 5000 mg/kg

Species: Rat

Dermal route: LD50 > 5000 mg/kg

Species: Rabbit

Inhalation route: LC50 = 5.53 mg/l

Species: Rat

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

LD50 > 5000 mg/kgOral route:

Species: Rat

OECD Guideline 401 (Acute Oral Toxicity)

LD50 > 5000 mg/kgDermal route:

Species: Rabbit

OECD Guideline 402 (Acute Dermal Toxicity)

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Inhalation route: LC50 > 5000 mg/m3

Species: Rat

OECD Guideline 403 (Acute Inhalation Toxicity)

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Skin corrosion/skin irritation:

Hydrocarbons, C11-C12, isoalkanes, < 2 % aromatics: Not classified as harmful but marked with EUH066.

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

DISTILLATES (PETROLEUM), SOLVENT-DEWAXED LIGHT PARAFFINIC (CAS: 64742-56-9)

Irritation: Average score = 0.17

Effect observed: Erythema score

Species: Rabbit

Duration of exposure: 72 h

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

Corrosivity: No observed effect.

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.

DISTILLATES (PETROLEUM), SOLVENT-DEWAXED LIGHT PARAFFINIC (CAS: 64742-56-9)

Iritis: Average score = 0

Species: Rabbit

Duration of exposure: 48 h

Conjunctival redness: Average score = 0.33

Species: Rabbit

Duration of exposure: 48 h

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

OECD Guideline 405 (Acute Eye Irritation / Corrosion)

Respiratory or skin sensitisation:

Hydrocarbons, C11-C12, isoalkanes, < 2 % aromatics: Not classified as sensitizing.

Propan-2-ol: Not sensitizing.

DISTILLATES (PETROLEUM), SOLVENT-DEWAXED LIGHT PARAFFINIC (CAS: 64742-56-9)

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

Species: Guinea pig

Germ cell mutagenicity:

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

No mutagenic effect.

DISTILLATES (PETROLEUM), SOLVENT-DEWAXED LIGHT PARAFFINIC (CAS: 64742-56-9)

No mutagenic effect.

Mutagenesis (in vivo): Negative.

OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)

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

No mutagenic effect.

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

No mutagenic effect.

OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)

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OECD Guideline 471 (Bacterial Reverse Mutation Assay)

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Carcinogenicity:

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

Carcinogenicity Test: Negative.

No carcinogenic effect.

DISTILLATES (PETROLEUM), SOLVENT-DEWAXED LIGHT PARAFFINIC (CAS: 64742-56-9)

Carcinogenicity Test: Negative.

No carcinogenic effect. Species: Mouse

OECD Guideline 451 (Carcinogenicity Studies)

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

DISTILLATES (PETROLEUM), SOLVENT-DEWAXED LIGHT PARAFFINIC (CAS: 64742-56-9)

No toxic effect for reproduction

Study on fertility: Species: Rat Study on development: Species: Rat

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

OECD Guideline 414 (Prenatal Developmental Toxicity Study)

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.

Distillates (petroleum), solvent-dewaxed light paraffinic: No data available.

Specific target organ systemic toxicity - repeated exposure:

Propan-2-ol: To human: Not listed 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.

Distillates (petroleum), solvent-dewaxed light paraffinic: No data available.

Aspiration hazard:

Hydrocarbons, C11-C12, isoalkanes, < 2 % aromatics: May be fatal if swallowed and enters respiratory tract.

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

Distillates (petroleum), solvent-dewaxed light paraffinic: Aspiration hazard - Category 1

11.1.2. Mixture

No toxicological data available for the mixture.

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SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

12.1.1. Substances

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

LC50 = 9640 mg/lFish toxicity:

Species: Pimephales promelas Duration of exposure: 96 h

OECD Guideline 203 (Fish, Acute Toxicity Test)

EC50 = 9714 mg/lCrustacean toxicity:

Species: Daphnia magna Duration of exposure: 24 h

OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)

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Algae toxicity: ECr50 > 1000 mg/l

Species: Scenedesmus subspicatus Duration of exposure: 72 h

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

Fish toxicity: LC50 > 1000 mg/l

> Species: Oncorhynchus mykiss Duration of exposure: 96 h

EC50 > 1000 mg/lCrustacean toxicity:

Species: Daphnia magna Duration of exposure: 48 h

NOEC >= 1 mg/lSpecies: Daphnia magna Duration of exposure: 21 days

ECr50 > 1000 mg/lAlgae toxicity:

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: Transformation due to hydrolysis and due to photolysis is not expected to be significant. Expected to degrade rapidly in air. Inherently biologically degradable.

Distillates (petroleum), solvent-dewaxed light paraffinic: Inherent.

12.2.1. Substances

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

Biodegradability: Rapidly degradable.

DISTILLATES (PETROLEUM), SOLVENT-DEWAXED LIGHT PARAFFINIC (CAS: 64742-56-9)

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

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

Biodegradability: Rapidly degradable.

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

Biodegradability: Rapidly degradable. SAFETY DATA SHEET (REGULATION (EC) n° 1907/2006 - REACH)

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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.

Distillates (petroleum), solvent-dewaxed light paraffinic: High.

12.3.1. Substances

DISTILLATES (PETROLEUM), SOLVENT-DEWAXED LIGHT PARAFFINIC (CAS: 64742-56-9)

Octanol/water partition coefficient: log Koe = 3

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.

Hydrocarbons, C11-C12, isoalkanes, < 2 % aromatics: The product can evaporate relatively quickly. It is presumed that there is no distribution in the sediment layer and waste water substances.

Distillates (petroleum), solvent-dewaxed light paraffinic: No data available.

12.5. Results of PBT and vPvB assessment

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

Hydrocarbons, C11-C12, isoalkanes, < 2 % aromatics: PBT/vPvB: No. Distillates (petroleum), solvent-dewaxed light paraffinic: PBT/vPvB: No.

12.6. Other adverse effects

No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

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

13.1. Waste treatment methods

Do not pour into drains or waterways.

Waste:

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

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

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

Soiled packaging:

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

Give to a certified disposal contractor.

SECTION 14: TRANSPORT INFORMATION

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2015 - IMDG 2014 - ICAO/IATA 2015).

14.1. UN 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.

2°Label

Pack gr.

14.4. Packing group

IMDG

14.5. Environmental hazards

14.6. Special precautions for user ADR/RID Class Code Pack gr. Label Ident. LQ Provis ΕO Cat Tunnel 190 327 344 625 5F 2.1 1 L E0 D

Provis.

EO

EMS

Class

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LEAFSHINE (B/P) - 11836-10083-10594-EN

	2.1	See SP63	-	SP277	F-D,S-U	63 190 277 327	E0		
						344 959			
IATA	Class	2°Label	Pack gr.	Passager	Passager	Cargo	Cargo	note	EQ
	2.1	-	-	203	75 kg	203	150 kg	A145	E0
								A167	
								A802	
	2.1	-	-	Y203	30 kg G	-	-	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. Transport in bulk according to Annex II of Marpol and the IBC Code

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:

- Directive 75/734/CEE modified by directive 2013/10/UE
- EU Regulation No. 1272/2008 amended by EU Regulation No. 487/2013.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 758/2013.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 944/2013.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 605/2014.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 1297/2014.

- 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:

Propan-2-ol

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

Distillates (petroleum), solvent-dewaxed light paraffinic

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.

EUH066 Repeated exposure may cause skin dryness or cracking.

Abbreviations:

DNEL: Derived No-Effect Level

PNEC: Predicted No-Effect Concentration

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

IMDG: International Maritime Dangerous Goods. IATA: International Air Transport Association. ICAO: International Civil Aviation Organisation

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

WGK: Wassergefahrdungsklasse (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 (13/07/2015) / Version: N°1 (15/07/2015)

(REACH regulation (EC) n° 1907/2006 - n° 2015/830)

Revision: N°3 (23/08/2013) / Version: N°5 (25/06/2014)

SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 453/2010)

SECTION 2: HAZARDS IDENTIFICATION

In compliance with directives 67/548/EEC, 1999/45/EC and their amendments.

Extremely flammable (F+, R 12).

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Composition:

GHS08, GHS02	Identification	(EC) 1272/2008	67/548/EEC	Note	<u>7</u>
HYDROCARBONS, C11 C12, ISOALKANES, C2	EC: 918-167-1	GHS08, GHS02	Xn		25 <= x % < 50
HYDROCARBONS, C11 C12, ISOALKANES,	REACH: 01-2119472146-39	Dgr	Xn;R65		
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		Flam. Liq. 3, H226	R66		
NDEX: 601 001 00 0 CAS: 106 97-8 Dgr Fir. 12 H1 Fir. 12 H2 Fir. 12 Fir. 1	HYDROCARBONS, C11-C12, ISOALKANES,	Asp. Tox. 1, H304			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	< 2 % AROMATICS	EUH:066			
EC: 203-448-7 REACH: 01 2119474691 32 BUTANE (< 0.1 % 1.3 BUTADIENE) CAS: 64742 56-9 Bgr REACH: 01 2119480132 48 DISTILLATES (PETROLEUM). SOLVENT DEWAXED LIGHT PARAFFINIC CAS: 67 63-0 Bgr REACH: 01 2119457558 25 Flam. Liq. 2, H225 Flam. Liq. 2, H225 Fye Irrit. 2, H319 PROPAN 2-OL Identification (EC) 1272/2008 FC: 918-167-1 REACH: 01-2119472146-39 Bgr HYDROCARBONS, C11-C12, ISOALKANES, < 2 % AROMATICS CAS: 106-97-8 CC: 203-448-7 REACH: 01-2119474691-32 Flam. Gas 1, H220 Press. Gas, H280 BUTANE (< 0.1 % 1,3-BUTADIENE) CAS: 64742-56-9 CAS: 64742-	INDEX: 601-004-00-0	GHS02, GHS04	F+	C	10 <= x % < 25
EC: 203-448-7 REACH: 01 2119474691 32 BUTANE (< 0.1 % 1.3 BUTADIENE) CAS: 64742 56-9 Bgr REACH: 01 2119480132 48 DISTILLATES (PETROLEUM). SOLVENT DEWAXED LIGHT PARAFFINIC CAS: 67 63-0 Bgr REACH: 01 2119457558 25 Flam. Liq. 2, H225 Flam. Liq. 2, H225 Fye Irrit. 2, H319 PROPAN 2-OL Identification (EC) 1272/2008 FC: 918-167-1 REACH: 01-2119472146-39 Bgr HYDROCARBONS, C11-C12, ISOALKANES, < 2 % AROMATICS CAS: 106-97-8 CC: 203-448-7 REACH: 01-2119474691-32 Flam. Gas 1, H220 Press. Gas, H280 BUTANE (< 0.1 % 1,3-BUTADIENE) CAS: 64742-56-9 CAS: 64742-	CAS: 106-97-8	Dgr	F+;R12	[1]	
BUTANE (<0,1 % 1,3 BUTADIENE) CAS: 64742 56 9 BC: 265 1459 2 REACH: 01 2119480132 48 DISTILLATES (PETROLEUM). SOLVENT DEWAXED LIGHT PARAFFINIC CAS: 67-63 0 EC: 200 661 7 REACH: 01 2119457558 25 PROPAN 2 OL Identification (EC) 1272/2008 EC: 918-167-1 REACH: 01-2119472146-39 BITANE (<0,1 % 1,3 BUTADIENE) GHS07, GHS02 Xi Xi Xi RF36 Fiam. Liq. 2, H225 Fix11 Fixe Irrit. 2, H319 R67 STOT SE 3, H336 HYDROCARBONS, C11-C12, ISOALKANES, <2 % AROMATICS CAS: 106-97-8 EC: 203-448-7 Dgr GHS02 Dgr REACH: 01-2119474691-32 Fiam. Liq. 3, H226 Asp. Tox. 1, H304 CAS: 64742-56-9 GHS08 Dgr REACH: 01-2119474691-32 Fiam. Gas 1, H220 Press. Gas, H280 CAS: 64742-56-9 GHS08 Dgr REACH: 01-2119480132-48 GHS08 Dgr REACH: 01-2119480132-48	EC: 203-448-7				
CAS: 64742-56-9 GHS08 10 <= x % < 25	REACH: 01-2119474691-32				
CAS: 64742-56-9 GHS08 10 <= x % < 25					
Dgr Asp. Tox. 1, H304 Dgr Asp. Tox.	BUTANE (< 0,1 % 1,3 BUTADIENE)				
Asp. Tox. 1, H304 Sep.	CAS: 64742-56-9				$10 \le x \% < 25$
DISTILLATES (PETROLEUM); SOLVENT DEWAXED LIGHT PARAFFINIC CAS: 67 63 0 GHS07, GHS02 Xi; R36 Flam. Liq. 2, H225 Eye Irrit. 2, H319 R67 REACH: 01 2119457558 25 Flam. Liq. 2, H225 Eye Irrit. 2, H319 R67 R6					
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	REACH: 01-2119480132-48	Asp. Tox. 1, H304			
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$					
CAS: 67-63-0 GHS07, GHS02 Xi Xi HI 2.5 ← x % < 10 EC: 200-661-7 Dgg Xi;R36 FRH1 Xi;R36 FRH1 FRH1 R67 PROPAN 2-OL STOT SE 3, H336 FRH1 R67 Note % EC: 918-167-1 GHS08, GHS02 Dgr 25 <= x % < 50					
EC: 200 661 7 REACH: 01 2119457558 25 PROPAN 2 OL Identification (EC) 1272/2008 EC: 918-167-1 REACH: 01-2119472146-39 HYDROCARBONS, C11-C12, ISOALKANES, 2 % AROMATICS CAS: 106-97-8 EC: 203-448-7 REACH: 01-2119474691-32 BUTANE (< 0,1 % 1,3-BUTADIENE) CAS: 64742-56-9 EC: 265-159-2 REACH: 01-2119480132-48 Dgg Flam. Liq. 2, H225 F;R11 R67 Note % CS HYDROCARBONS, C11-C12, ISOALKANES, Asp. Tox. 1, H304 EUH:066 CC CC 10 <= x % < 25 EFRIT R67 Dgr Flam. Liq. 3, H226 Asp. Tox. 1, H304 EUH:066 CC 10 <= x % < 25 EC: 203-448-7 Dgr Flam. Gas 1, H220 Press. Gas, H280 IO <= x % < 25 EC: 265-159-2 REACH: 01-2119480132-48					
REACH: 01-2119457558-25		,		[1]	$2.5 \le x \% < 10$
Eye Irrit. 2, H319 R67 R					
STOT SE 3, H336 STOT SE 3, H326 STOT SE 3, H336 STOT SE 3, H326 STOT SE 3, H336 STOT SE 3,	REACH: 01-2119457558-25	Flam. Liq. 2, H225			
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$			R67		
EC: 918-167-1 REACH: 01-2119472146-39 Dgr Flam. Liq. 3, H226 Asp. Tox. 1, H304 EUH:066 CAS: 106-97-8 EC: 203-448-7 REACH: 01-2119474691-32 BUTANE (< 0,1 % 1,3-BUTADIENE) CAS: 64742-56-9 EC: 265-159-2 REACH: 01-2119480132-48 GHS08 Dgr Flam. Liq. 3, H226 Asp. Tox. 1, H304 EUH:066 CC CAS: 106-97-8 EUH:066 CC CAS: 048-04-04-04-04-04-04-04-04-04-04-04-04-04-					
REACH: 01-2119472146-39 REACH: 01-2119472146-39 Dgr Flam. Liq. 3, H226 Asp. Tox. 1, H304 EUH:066 CAS: 106-97-8 EC: 203-448-7 REACH: 01-2119474691-32 BUTANE (< 0,1 % 1,3-BUTADIENE) CAS: 64742-56-9 EC: 265-159-2 REACH: 01-2119480132-48 Dgr Flam. Liq. 3, H226 Asp. Tox. 1, H304 CC 10 <= x % < 25 [1] [7] [7] Press. Gas, H280 10 <= x % < 25 Dgr Asp. Tox. 1, H304				Note	7.5
Flam. Liq. 3, H226 Asp. Tox. 1, H304 EUH:066					$25 \le x \% < 50$
HYDROCARBONS, C11-C12, ISOALKANES, Asp. Tox. 1, H304 EUH:066 CAS: 106-97-8 EC: 203-448-7 REACH: 01-2119474691-32 BUTANE (< 0,1 % 1,3-BUTADIENE) CAS: 64742-56-9 EC: 265-159-2 REACH: 01-2119480132-48 Asp. Tox. 1, H304 CC 10 <= x % < 25 [7] ITO	REACH: 01-2119472146-39				
< 2 % AROMATICS					
CAS: 106-97-8 EC: 203-448-7 REACH: 01-2119474691-32 BUTANE (< 0,1 % 1,3-BUTADIENE) CAS: 64742-56-9 EC: 265-159-2 REACH: 01-2119480132-48 GHS02 Dgr Flam. Gas 1, H220 Press. Gas, H280 [7] [7] 10 <= x % < 25 [1] [7] [7] 10 <= x % < 25					
EC: 203-448-7 REACH: 01-2119474691-32 BUTANE (< 0,1 % 1,3-BUTADIENE) CAS: 64742-56-9 EC: 265-159-2 REACH: 01-2119480132-48 Dgr Flam. Gas 1, H220 Press. Gas, H280 [7] [7] [7] [7] [8] [1] [7] [7] [8] [8] [9] [1] [9] [1] [1] [1] [1] [1] [1] [1] [1] [1] [1					
REACH: 01-2119474691-32 Flam. Gas 1, H220 Press. Gas, H280 [7] BUTANE (< 0,1 % 1,3-BUTADIENE) CAS: 64742-56-9 GHS08 Dgr REACH: 01-2119480132-48 Asp. Tox. 1, H304					10 <= x % < 25
Press. Gas, H280 BUTANE (< 0,1 % 1,3-BUTADIENE) CAS: 64742-56-9 EC: 265-159-2 REACH: 01-2119480132-48 Press. Gas, H280 GHS08 Dgr Asp. Tox. 1, H304					
BUTANE (< 0,1 % 1,3-BUTADIENE) CAS: 64742-56-9 EC: 265-159-2 REACH: 01-2119480132-48 GHS08 Dgr Asp. Tox. 1, H304	REACH: 01-2119474691-32	· ·		[7]	
CAS: 64742-56-9 EC: 265-159-2 REACH: 01-2119480132-48 GHS08 Dgr Asp. Tox. 1, H304		Press. Gas, H280			
EC: 265-159-2 REACH: 01-2119480132-48 Dgr Asp. Tox. 1, H304					
REACH: 01-2119480132-48 Asp. Tox. 1, H304					$10 \le x \% < 25$
		0			
DISTILLATES (PETROLEUM),	REACH: 01-2119480132-48	Asp. Tox. 1, H304			
DISTILLATES (PETROLEUM),					
SOLVENT-DEWAXED LIGHT PARAFFINIC	SOLVENT-DEWAXED LIGHT PARAFFINIC				

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CAS: 67-63-0	GHS07, GHS02	[1]	2.5 <= x % < 10
EC: 200-661-7	Dgr		
REACH: 01-2119457558-25	Flam. Liq. 2, H225		
	Eye Irrit. 2, H319		
PROPAN-2-OL	STOT SE 3, H336		

SECTION 11: TOXICOLOGICAL INFORMATION

Acute toxicity:

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

Inhalation route: LC50 > 10 mg/l

Germ cell mutagenicity:

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

Carcinogenicity:

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

Reproductive toxicant:

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

SECTION 12: ECOLOGICAL INFORMATION

12.2.1. Substances

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

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 2013—IMDG 2012—ICAO/IATA 2014).

IMDG	Clas	SS	2°Label	Pack gr.	LQ	EMS	5	Provis.	EQ		
	2.1	-	-	203	3	75 kg	203		150 kg	A145	E0
										A167	
										A145	
										A167	
										A802	

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2015 - IMDG 2014 - ICAO/IATA 2015).

	2.1	-	-	203	75 kg	203	150 kg	A145	E0
							-	A167	.
								A802	.

SECTION 15: REGULATORY INFORMATION

- Classification and labelling information included in section 2:
- -Directive 67/548/EEC and its adaptations
- -Directive 1999/45/EC and its adaptations
- Regulation EC 1272/2008 modified by regulation EC 618/2012
 - EU Regulation No. 1272/2008 amended by EU Regulation No. 487/2013.
 - EU Regulation No. 1272/2008 amended by EU Regulation No. 944/2013.
 - EU Regulation No. 1272/2008 amended by EU Regulation No. 605/2014.
 - EU Regulation No. 1272/2008 amended by EU Regulation No. 1297/2014.

SECTION 16: OTHER INFORMATION

Wording of the phrases mentioned in section 3:

R-11 Highly flammable.
R-12 Extremely flammable.
R-36 Irritating to eyes.

R-65 Harmful: may cause lung damage if swallowed.

R-66 Repeated exposure may cause skin dryness or cracking.

R 67 Vapours may cause drowsiness and dizziness.

H280 Contains gas under pressure; may explode if heated.

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Abbreviations:

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