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 : LIBERON Garden Furniture Oil - Clear - 1 L
Product code : 003781

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

Oil

Use descriptor system (REACH) :

Paints, varnishes and related products coating with layered application.

1.3. Details of the supplier of the safety data sheet

Registered company name : LIBERON Ltd
Address : .Mountfield Industrial Estate KENT TN28 8XU NEW ROMNEY GB
Telephone : + (44) 1797 367 555. Fax: + (44) 1797 367 575. Telex: .
fds.produits@v33.com
www.liberon.co.uk

1.4. Emergency telephone number : .

Association/Organisation : .

Other emergency numbers

UK - National Poisons Information Service

SECTION 2 : HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

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

Repeated exposure may cause skin dryness or cracking (EUH066).
May produce an allergic reaction (EUH208).
Aspiration hazard, Category 1 (Asp. Tox. 1, H304).
This mixture does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.
This mixture does not present an environmental hazard. No known or foreseeable environmental damage under standard conditions of use.

2.2. Label elements

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

Hazard pictograms :

GHS08

Signal Word :
DANGER
Product identifiers :

EC 926-141-6	HYDROCARBONS, C11-C14, N-ALKANES, ISOALKANES, CYCLICS, <2% AROMATICS

Additional labeling :

EUH208	Contains 2-BUTANONE OXIME. May produce an allergic reaction.

Hazard statements :

H304	May be fatal if swallowed and enters airways.
EUH066	Repeated exposure may cause skin dryness or cracking.

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 :

P271	Use only outdoors or in a well-ventilated area.

Precautionary statements - Response :

P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor/...
P331	Do NOT induce vomiting.

Precautionary statements - Disposal :

P501 Dispose of contents/container to a waste collection center (contact the local authority)

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.

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Composition :

Identification	(EC) 1272/2008	Note	%
INDEX: Z473 EC: 926-141-6 REACH: 01-2119456620-43 HYDROCARBONS, C11-C14, N-ALKANES, ISOALKANES, CYCLICS, <2% AROMATICS	GHS08 Dgr Asp. Tox. 1, H304 EUH:066		25 <= x % < 50
INDEX: Z472 EC: 918-481-9 REACH: 01-2119457273-39 HYDROCARBONS, C10-C13, N-ALKANES, ISOALKANES, CYCLICS, <2% AROMATICS	GHS08 Dgr Asp. Tox. 1, H304 EUH:066		10 <= x % < 25
INDEX: Z470 EC: 919-857-5 REACH: 01-2119463258-33 HYDROCARBONS, C9-C11, N-ALKANES, ISOALKANES, CYCLICS, <2% AROMATICS	GHS07, GHS08, GHS02 Dgr Flam. Liq. 3, H226 Asp. Tox. 1, H304 STOT SE 3, H336 EUH:066		0 <= x % < 2.5
INDEX: 616_014_00_0 CAS: 96-29-7 EC: 202-496-6 REACH: 01-2119539477-28 2-BUTANONE OXIME	GHS06, GHS05, GHS08 Dgr Acute Tox. 3, H311 Skin Sens. 1, H317 Eye Dam. 1, H318 Carc. 2, H351	[1] [2]	0 <= x % < 2.5

Information on ingredients :

[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 an allergic reaction, seek medical attention.

In the event of splashes or contact with eyes :

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

In the event of splashes or contact with skin :

Remove contaminated clothing and wash the skin thoroughly with soap and water or a recognised cleaner.

Watch out for any remaining product between skin and clothing, watches, shoes, etc.

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

If the contaminated area is widespread and/or there is damage to the skin, a doctor must be consulted or the patient transferred to hospital.

In the event of swallowing :

Do not give the patient anything orally.

In the event of swallowing, if the quantity is small (no more than one mouthful), rinse the mouth with water and consult a doctor.

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.
If swallowed accidentally, do not allow to drink, do not induce vomiting and transfer to hospital immediately by ambulance. Show the label to the doctor.

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

No data available.

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

No data available.

SECTION 5 : FIREFIGHTING MEASURES

Non-flammable.

5.1. Extinguishing media

Suitable methods of extinction

In the event of a fire, use :
- sprayed water or water mist
- foam
- multipurpose ABC powder
- BC powder
- carbon dioxide (CO2)

Unsuitable methods of extinction

In the event of a fire, do not use :
- water jet

5.2. Special hazards arising from the substance or mixture

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.
Do not breathe in smoke.
In the event of a fire, the following may be formed :
- carbon monoxide (CO)
- carbon dioxide (CO2)

5.3. Advice for firefighters

No data available.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Consult the safety measures listed under headings 7 and 8.

For non first aid worker

Avoid any contact with the skin and eyes.

For first aid worker

First aid workers will be equipped with suitable personal protective equipment (See section 8).

6.2. Environmental precautions

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.
Prevent any material from entering drains or waterways.

6.3. Methods and material for containment and cleaning up

Clean preferably with a detergent, do not use solvents.

6.4. Reference to other sections

No data available.

SECTION 7 : HANDLING AND STORAGE

Requirements relating to storage premises apply to all facilities where the mixture is handled.

7.1. Precautions for safe handling

Always wash hands after handling.
Remove and wash contaminated clothing before re-using.
Ensure that there is adequate ventilation, especially in confined areas.

Fire prevention :

Handle in well-ventilated areas.
Never inhale this mixture.
Prevent access by unauthorised personnel.

Recommended equipment and procedures :

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

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

Prohibited equipment and procedures :

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

7.2. Conditions for safe storage, including any incompatibilities

No data available.

Storage

Keep out of reach of children.

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

Keep away from food and drink, including those for animals.

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

Packaging

Always keep in packaging made of an identical material to the original.

7.3. Specific end use(s)

No data available.

SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits :

- Germany - AGW (BAuA - TRGS 900, 07/06/2017) :

CAS	VME :	VME :	Excess	Notes	
96-29-7		0,3 ppm 1 mg/m3		8 (I)	

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

2-BUTANONE OXIME (CAS: 96-29-7)

Final use:	**Workers.**
Exposure method:	Dermal contact.
Potential health effects:	Long term local effects.
DNEL :	1.3 mg/kg de poids corporel/jour
Exposure method:	Dermal contact.
Potential health effects:	Long term systemic effects.
DNEL :	1.3 mg/kg de poids corporel/jour
Exposure method:	Inhalation.
Potential health effects:	Long term local effects.
DNEL :	0.94 ppm
Exposure method:	Inhalation.
Potential health effects:	Long term systemic effects.
DNEL :	94 ppm

Final use:	**Consumers.**
Exposure method:	Dermal contact.
Potential health effects:	Long term local effects.
DNEL :	0.78 mg/kg de poids corporel/jour
Exposure method:	Dermal contact.
Potential health effects:	Long term systemic effects.
DNEL :	0.78 mg/kg de poids corporel/jour
Exposure method:	Inhalation.
Potential health effects:	Long term local effects.
DNEL :	2 mg de substance/m3
Exposure method:	Inhalation.
Potential health effects:	Long term systemic effects.

DNEL : 2 mg de substance/m3

HYDROCARBONS, C9-C11, N-ALKANES, ISOALKANES, CYCLICS, <2% AROMATICS

Final use:	**Workers.**
Exposure method:	Dermal contact.
Potential health effects:	Long term systemic effects.
DNEL :	208 mg/kg de poids corporel/jour
Exposure method:	Inhalation.
Potential health effects:	Long term systemic effects.
DNEL :	871 mg de substance/m3

Final use:	**Consumers.**
Exposure method:	Ingestion.
Potential health effects:	Long term systemic effects.
DNEL :	125 mg/kg de poids corporel/jour
Exposure method:	Dermal contact.
Potential health effects:	Long term systemic effects.
DNEL :	125 mg/kg de poids corporel/jour
Exposure method:	Inhalation.
Potential health effects:	Long term systemic effects.
DNEL :	185 mg de substance/m3

Predicted no effect concentration (PNEC):

2-BUTANONE OXIME (CAS: 96-29-7)

Environmental compartment:	Fresh water.
PNEC :	0.256 mg/l
Environmental compartment:	Waste water treatment plant.
PNEC :	17.7 mg/l

8.2. Exposure controls

Personal protection measures, such as personal protective equipment

Use personal protective equipment that is clean and has been properly maintained.
Store personal protective equipment in a clean place, away from the work area.
Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

- Eye / face protection

Avoid contact with eyes.
Use eye protectors designed to protect against liquid splashes
Before handling, wear safety goggles in accordance with standard EN166.

- Hand protection

Wear suitable protective gloves in the event of prolonged or repeated skin contact.
Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN374.
Gloves must be selected according to the application and duration of use at the workstation.
Protective gloves need to be selected according to their suitability for the workstation in question : other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required.
Type of gloves recommended :
- Nitrile rubber (butadiene-acrylonitrile copolymer rubber (NBR))
- PVA (Polyvinyl alcohol)
Recommended properties :
- Impervious gloves in accordance with standard EN374

- Body protection

Avoid skin contact.
Wear suitable protective clothing.
Suitable type of protective clothing :
In the event of substantial spatter, wear liquid-tight protective clothing against chemical risks (type 3) in accordance with EN14605 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.

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

General information :

Physical state :	Fluid liquid.

Important health, safety and environmental information

pH :	Not relevant.
Boiling point/boiling range :	Not relevant.
Flash Point :	66.50 °C.
Vapour pressure (50°C) :	Not relevant.
Density :	0.85-0.95
Water solubility :	Insoluble.
Viscosity:	v < 7 mm2/s (40°C)
	Method for determining the viscosity :
	ISO 3104 (Petroleum products - Transparent and opaque liquids - Determination of kinematic viscosity and calculation of dynamic viscosity).
Melting point/melting range :	Not relevant.
Self-ignition temperature :	Not relevant.
Decomposition point/decomposition range :	Not relevant.

9.2. Other information

No data available.

SECTION 10 : STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

This mixture is stable under the recommended handling and storage conditions in section 7.

10.3. Possibility of hazardous reactions

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

10.4. Conditions to avoid

10.5. Incompatible materials

10.6. Hazardous decomposition products

The thermal decomposition may release/form :

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

SECTION 11 : TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Exposure to vapours from solvents in the mixture in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on kidney, liver and central nervous system.
Symptoms produced will include headaches, numbness, dizziness, fatigue, muscular asthenia and, in extreme cases, loss of consciousness.
Repeated or prolonged contact with the mixture may cause removal of natural oil from the skin resulting in non-allergic contact dermatitis and absorption through the skin.
Splashes in the eyes may cause irritation and reversible damage
Aspiration toxicity includes severe acute effects such as chemical pneumonia, varying degrees of pulmonary injury or death following aspiration.

11.1.1. Substances

Acute toxicity :

2-BUTANONE OXIME (CAS: 96-29-7)

Oral route :	LD50 = 2326 mg/kg Species : Rat
Dermal route :	LD50 = 1000 mg/kg Species : Rabbit

Inhalation route (n/a) : LC50 = 13200 mg/m3
Species : Rat

HYDROCARBONS, C9-C11, N-ALKANES, ISOALKANES, CYCLICS, <2% AROMATICS
Oral route : LD50 > 5000 mg/kg
Species : Rat
OCDE Ligne directrice 401 (Toxicité aiguë par voie orale)

Dermal route : LD50 > 5000 mg/kg
Species : Rabbit
OCDE Ligne directrice 402 (Toxicité aiguë par voie cutanée)

Inhalation route (n/a) : LC50 > 5000 mg/l
Species : Rat
OCDE Ligne directrice 403 (Toxicité aiguë par inhalation)

HYDROCARBONS, C10-C13, N-ALKANES, ISOALKANES, CYCLICS, <2% AROMATICS
Oral route : LD50 > 5000 mg/kg
Species : Rat
OCDE Ligne directrice 401 (Toxicité aiguë par voie orale)

Dermal route : LD50 > 2000 mg/kg
Species : Rat
OCDE Ligne directrice 402 (Toxicité aiguë par voie cutanée)

Inhalation route (n/a) : LC50 > 5000 mg/m3
Species : Rat
OCDE Ligne directrice 403 (Toxicité aiguë par inhalation)

Germ cell mutagenicity :

HYDROCARBONS, C9-C11, N-ALKANES, ISOALKANES, CYCLICS, <2% AROMATICS
No mutagenic effect.

Carcinogenicity :

HYDROCARBONS, C9-C11, N-ALKANES, ISOALKANES, CYCLICS, <2% AROMATICS
Carcinogenicity Test : Negative.
No carcinogenic effect.

11.1.2. Mixture

Respiratory or skin sensitisation :

Contains at least one sensitising substance. May cause an allergic reaction.

Aspiration hazard :

May be fatal if swallowed and enters airways.
Aspiration toxicity includes severe acute effects such as chemical pneumonia, varying degrees of pulmonary injury or death following aspiration.

SECTION 12 : ECOLOGICAL INFORMATION

12.1. Toxicity

12.1.1. Substances

2-BUTANONE OXIME (CAS: 96-29-7)
Fish toxicity : LC50 > 100 mg/l
Duration of exposure : 96 h

NOEC = 50 mg/l

Crustacean toxicity : EC50 = 201 mg/l
Duration of exposure : 48 h

NOEC = 100 mg/l

Algae toxicity : ECr50 = 11.8 mg/l
Duration of exposure : 72 h

NOEC = 2.56 mg/l

HYDROCARBONS, C9-C11, N-ALKANES, ISOALKANES, CYCLICS, <2% AROMATICS

Fish toxicity :
LC50 > 1000 mg/l
Species : Oncorhynchus mykiss
Duration of exposure : 96 h
OCDE Ligne directrice 203 (Poisson, essai de toxicité aiguë)

NOEC = 0.23 mg/l
Species : Oncorhynchus mykiss
Duration of exposure : 28 jours

Crustacean toxicity :
EC50 > 1000 mg/l
Species : Daphnia magna
Duration of exposure : 48 h
OCDE Ligne directrice 202 (Daphnia sp., essai d'immobilisation immédiate)

NOEC = 0.13 mg/l
Species : Daphnia magna
Duration of exposure : 21 jours

Algae toxicity :
ECr50 > 1000 mg/l
Species : Pseudokirchnerella subcapitata
Duration of exposure : 72 h
OCDE Ligne directrice 201 (Algues, Essai d'inhibition de la croissance)

NOEC = 3 mg/l
Species : Pseudokirchnerella subcapitata
Duration of exposure : 72 h
OCDE Ligne directrice 201 (Algues, Essai d'inhibition de la croissance)

HYDROCARBONS, C10-C13, N-ALKANES, ISOALKANES, CYCLICS, <2% AROMATICS

Fish toxicity :
LC50 > 1000 mg/l
Species : Oncorhynchus mykiss
Duration of exposure : 96 h
OCDE Ligne directrice 203 (Poisson, essai de toxicité aiguë)

NOEC = 0.10 mg/l
Species : Oncorhynchus mykiss
Duration of exposure : 28 jours
Autres lignes directrices

Crustacean toxicity :
EC50 > 1000 mg/l
Species : Daphnia magna
Duration of exposure : 48 h
OCDE Ligne directrice 202 (Daphnia sp., essai d'immobilisation immédiate)

NOEC = 0.18 mg/l
Species : Daphnia magna
Duration of exposure : 21 jours
Autres lignes directrices

Algae toxicity :
ECr50 > 1000 mg/l
Species : Pseudokirchnerella subcapitata
Duration of exposure : 72 h
OCDE Ligne directrice 201 (Algues, Essai d'inhibition de la croissance)

12.1.2. Mixtures

No aquatic toxicity data available for the mixture.

12.2. Persistence and degradability

12.2.1. Substances

2-BUTANONE OXIME (CAS: 96-29-7)

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

HYDROCARBONS, C9-C11, N-ALKANES, ISOALKANES, CYCLICS, <2% AROMATICS
Biodegradability : no degradability data is available, the substance is considered as not degrading quickly.

HYDROCARBONS, C10-C13, N-ALKANES, ISOALKANES, CYCLICS, <2% AROMATICS
Biodegradability : Rapidly degradable.

12.3. Bioaccumulative potential

12.3.1. Substances

2-BUTANONE OXIME (CAS: 96-29-7)
Octanol/water partition coefficient : log Koe < 1

Bioaccumulation : BCF < 100.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

No data available.

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.
CAUTION: Oil cloths can self combust. Do not leave impregnated cloths in bundles. Before discarding lay them flat outside to dry to avoid a fire hazard.

13.1. Waste treatment methods

Do not pour into drains or waterways.

Waste :

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.
Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company.
Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

Soiled packaging :

Empty container completely. Keep label(s) on container.
Give to a certified disposal contractor.

SECTION 14 : TRANSPORT INFORMATION

Exempt from transport classification and labelling.

14.1. UN number

-

14.2. UN proper shipping name

-

14.3. Transport hazard class(es)

-

14.4. Packing group

-

14.5. Environmental hazards

-

14.6. Special precautions for user

-

SECTION 15 : REGULATORY INFORMATION

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

- Classification and labelling information included in section 2:

The following regulations have been used:
- EU Regulation No. 1272/2008 amended by EU Regulation No. 2016/1179. (ATP 9)

- Container information:

Packaging to be fitted with child-resistant fastenings (see EC Regulation No. 1272/2008, Annex II, Part 3).
Containers to be fitted with a tactile warning of danger (see EC Regulation No. 1272/2008, Annex II, Part 3).

- Particular provisions :

No data available.

15.2. Chemical safety assessment

This product contains at least one substance with exposure scenarios. The RMM (risk management measures) and OC (Operating conditions) are included in the body of the SDS.

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 :

H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H311	Toxic in contact with skin.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer .
EUH066	Repeated exposure may cause skin dryness or cracking.

Abbreviations :

DNEL : Derived No-Effect Level
PNEC : Predicted No-Effect Concentration
CMR: Carcinogenic, mutagenic or reprotoxic.
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).
GHS08 : Health hazard
PBT: Persistent, bioaccumulable and toxic.
vPvB : Very persistent, very bioaccumulable.
SVHC : Substances of very high concern.