

# 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 : LIBERON - IRON PASTE - 1L

Product code : 126773

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

#### 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/NL: 111 - Emergency Action: In the event of a medical enquiry involving this product, please contact your doctor or local hospital accident and emergency department.

Republic of Ireland : +353 (0)1 809

2166 - Emergency medical information: 8am-10pm (seven days) contact NPIC, Beaumont Hospital, Dublin 9 DOV2NO, Ireland.

## SECTION 2 : HAZARDS IDENTIFICATION

### 2.1. Classification of the substance or mixture

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

Flammable liquid, Category 3 (Flam. Liq. 3, H226).

Repeated exposure may cause skin dryness or cracking (EUH066).

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 :



GHS02

Signal Word :

WARNING

Additional labeling :

Hazard statements :

H226

Flammable liquid and vapour.

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 :

P210

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

P271

Use only outdoors or in a well-ventilated area.

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)  $\geq 0.1\%$  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 >= 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.

## SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2. Mixtures

#### Composition :

Identification	(EC) 1272/2008	Note	%
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		25 <= x % < 50
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		10 <= x % < 25
INDEX: Z858 CAS: 1333-86-4 EC: 215-609-9 REACH: 01-2119384822-32  NOIR DE CARBONE, AMORPHE		[1] [nano]	0 <= x % < 2.5

#### Nanoform

Identification	Nanoform
INDEX: Z858 CAS: 1333-86-4 EC: 215-609-9 REACH: 01-2119384822-32  NOIR DE CARBONE, AMORPHE	Number based particle size distribution: d10 : 20 - 43 nm d50 : 30 - 87 nm d90 : 54 - 178 nm Specific surface area: 35 - 600 m²/g

#### Information on ingredients :

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

[Nano] Nanoform.

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

#### Other data :

N/A

## 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 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.

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 :

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

No data available.

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

No data available.

### SECTION 5 : FIREFIGHTING MEASURES

Flammable.

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

#### 5.1. Extinguishing media

Keep packages near the fire cool, to prevent pressurised containers from bursting.

#### Suitable methods of extinction

In the event of a fire, use :

- sprayed water or water mist
- water with AFFF (Aqueous Film Forming Foam) additive
- halon
- foam
- multipurpose ABC powder
- BC powder
- carbon dioxide (CO<sub>2</sub>)

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 (CO<sub>2</sub>)

#### 5.3. Advice for firefighters

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

### 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.

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.

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.

Prevent the accumulation of electrostatic charges with connections to earth.

The mixture can become electrostatically charged: always ground when decanting. Wear antistatic shoes and clothing and make floors of non-conductive

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.

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 all sources of ignition - do not smoke.

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

Avoid accumulation of electrostatic charges.

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 :

- France (INRS - Outils 65 / 2021-1849, 2021-1763, decree of 09/12/2021) :

CAS	VME-ppm :	VME-mg/m3 :	VLE-ppm :	VLE-mg/m3 :	Notes :	TMP No :
1333-86-4	-	3.5	-	-	-	-

- ACGIH TLV (American Conference of Governmental Industrial Hygienists, Threshold Limit Values, 2010) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
1333-86-4	3 (l) mg/m3			A3	

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

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
1333-86-4	3.5 mg/m <sup>3</sup>	7 mg/m <sup>3</sup>			

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

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

##### Final use:

Exposure method:

Potential health effects:

DNEL :

##### Workers.

Dermal contact.

Long term systemic effects.

208 mg/kg body weight/day

Exposure method:

Potential health effects:

DNEL :

Inhalation.

Long term systemic effects.

871 mg of substance/m<sup>3</sup>

##### Final use:

Exposure method:

Potential health effects:

DNEL :

##### Consumers.

Ingestion.

Long term systemic effects.

125 mg/kg body weight/day

Exposure method:

Dermal contact.

Potential health effects:	Long term systemic effects.
DNEL :	125 mg/kg body weight/day
Exposure method:	Inhalation.
Potential health effects:	Long term systemic effects.
DNEL :	185 mg of substance/m3

## 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

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN ISO 374-1.

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)

#### - 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/A1 to prevent skin contact.

In the event of a risk of splashing, wear protective clothing against chemical risks (type 6) in accordance with EN13034/A1 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

#### Physical state

Physical state :	Paste.
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#### Colour

N/A

#### Odour

Odour threshold :	Not stated.
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#### Melting point

Melting point/melting range :	Not relevant.
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#### Freezing point

Freezing point / Freezing range :	Not stated.
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#### Boiling point or initial boiling point and boiling range

Boiling point/boiling range :	Not relevant.
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#### Flammability

Flammability (solid, gas) :	Not stated.
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#### Lower and upper explosion limit

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

Flash Point Interval :	23°C <= FP <= 55°C
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#### Auto-ignition temperature

Self-ignition temperature :	Not relevant.
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**Decomposition temperature**

Decomposition point/decomposition range :	Not relevant.
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**pH**

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

**Kinematic viscosity**

Viscosity :	Not stated.
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**Solubility**

Water solubility :	Insoluble.
Fat solubility :	Not stated.

**Partition coefficient n-octanol/water (log value)**

Partition coefficient: n-octanol/water :	Not stated.
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**Vapour pressure**

Vapour pressure (50°C) :	Not relevant.
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**Density and/or relative density**

Density :	< 1
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**Relative vapour density**

Vapour density :	Not stated.
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**9.2. Other information**

No data available.

**9.2.1. Information with regard to physical hazard classes**

No data available.

**9.2.2. Other safety characteristics**

No data available.

**SECTION 10 : STABILITY AND REACTIVITY****10.1. Reactivity**

No data available.

**10.2. Chemical stability**

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

**10.3. Possibility of hazardous reactions**

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

**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 :

- accumulation of electrostatic charges.
- heating
- heat
- flames and hot surfaces

**10.5. Incompatible materials**

No data available.

**10.6. Hazardous decomposition products**

The thermal decomposition may release/form :

- carbon monoxide (CO)
- carbon dioxide (CO<sub>2</sub>)

**SECTION 11 : TOXICOLOGICAL INFORMATION****11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**

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

**11.1.1. Substances**

**Acute toxicity :**

NOIR DE CARBONE, AMORPHE (CAS: 1333-86-4)

Oral route : LD50 > 8000 mg/kg  
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 (Vapours) : 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 (Vapours) : LC50 > 5000 mg/m3  
Species : Rat  
OCDE Ligne directrice 403 (Toxicité aiguë par inhalation)

**Skin corrosion/skin irritation :**

NOIR DE CARBONE, AMORPHE (CAS: 1333-86-4)

Irritation : No observed effect.  
Average score < 1.5  
Species : Rabbit

**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**

No toxicological data available for the mixture.

**11.2. Information on other hazards**

**Monograph(s) from the IARC (International Agency for Research on Cancer) :**

CAS 108-05-4 : IARC Group 2B : The agent is possibly carcinogenic to humans.  
CAS 1333-86-4 : IARC Group 2B : The agent is possibly carcinogenic to humans.

**SECTION 12 : ECOLOGICAL INFORMATION**

**12.1. Toxicity**

**12.1.1. Substances**

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

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



No data available.

**12.4. Mobility in soil**

No data available.

**12.5. Results of PBT and vPvB assessment**

No data available.

**12.6. Endocrine disrupting properties**

No data available.

**12.7. 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

Exempt from transport classification and labelling.

**14.1. UN number or ID 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**

-

**14.7. Maritime transport in bulk according to IMO instruments**

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## 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:**

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**

No data available.

## 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.
H336	May cause drowsiness or dizziness.
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.

NOEC : The concentration with no observed effect.

REACH : Registration, Evaluation, Authorization and Restriction of Chemical Substances.

DNEL : Derived No-Effect Level

STEL : Short-term exposure limit

TWA : Time Weighted Averages

TMP : French Occupational Illness table

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.