According to 1907/2006/EC (REACH), 2015/830/EU



# MINOS TECH WHITE LITHIUM GREASE SPRAY - White lithium grease spray 24-086



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

1.1 Product identifier: MINOS TECH WHITE LITHIUM GREASE SPRAY - White lithium grease spray

24-086

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

Relevant uses: grease lubricant

Uses advised against: All uses not specified in this section or in section 7.3

EVOCHEM S.A. 1.3 **Details of the supplier of the safety data sheet:** Tzaverdella Place

133 41 PHILI , ATTICA - GREECE

Phone.: 0030 210 5590460 , 0030 210 5590155 -Fax: 0030 210 6254737, 0030 210 5590244 info@evochem.gr; vmergoupis@evochem.gr;

sales@evochem.gr www.evochem.gr

**Emergency telephone number:** National Poisoning Center 2107793777 1.4

#### SECTION 2: HAZARDS IDENTIFICATION \*\*

#### 2.1 Classification of the substance or mixture:

#### CLP Regulation (EC) no 1272/2008:

Classification of this product has been carried out in accordance with CLP Regulation (EC) no 1272/2008.

Aerosol 1: Pressurised container: May burst if heated., H229

Aerosol 1: Flammable aerosols, Category 1, H222

Aquatic Chronic 3: Hazardous to the aquatic environment, long-term hazard, Category 3, H412

Eye Irrit. 2: Eye irritation, Category 2, H319 Repr. 2: Reproductive toxicity, Category 2, H361f Skin Irrit. 2: Skin irritation, Category 2, H315

STOT RE 2: Specific target organ toxicity, repeated exposure, Category 2, H373

#### 2.2 Label elements:

#### CLP Regulation (EC) no 1272/2008:







# **Hazard statements:**

Aerosol 1: H229 - Pressurized container: May burst if heated

Aerosol 1: H222 - Extremely flammable aerosol

Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects

Eye Irrit. 2: H319 - Causes serious eye irritation Repr. 2: H361f - Suspected of damaging fertility.

Skin Irrit. 2: H315 - Causes skin irritation

STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure

#### **Precautionary statements:**

P101: If medical advice is needed, have product container or label at hand

P102: Keep out of reach of children

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

P280: Wear protective gloves/protective clothing/eye protection/face protection

P410+P412: Protect from sunlight. Do no expose to temperatures exceeding 50 °C/122°F

P501: Dispose of contents and / or their container according to the separated collection system used in your municipality

### Substances that contribute to the classification

N-hexane

#### 2.3 Other hazards:

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<sup>\*\*</sup> Changes with regards to the previous version



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# SECTION 2: HAZARDS IDENTIFICATION \*\* (continued)

Product fails to meet PBT/vPvB criteria

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS \*\*

#### 3.1 Substance:

Non-applicable

#### 3.2 Mixture:

Chemical description: Oil/s

#### Components:

In accordance with Annex II of Regulation (EC) nº1907/2006 (point 3), the product contains:

Identification	Chemical name/Classification		Concentration
CAS: 64742-47-8 EC: 265-149-8 Index: 649-422-00-2 REACH 01-2119484819-18-XXX	Distillates (petroleum), hydrotreated light <sup>1</sup> Regulation 1272/2008   Asp. Tox. 1: H304 - Danger	ATP CLP00	24 - <50 %
CAS: 110-54-3 EC: 203-777-6 Index: 601-037-00-0 REACH 01-2119480412-44-XXX	N-hexane 1           Regulation 1272/2008         Aquatic Chronic 2: H411; Asp. Tox. 1: H304; Flam. Liq. 2: H225; Repr. 2: H361f; Skin Irrit. 2: H315; STOT RE 2: H373; STOT SE 3: H336 - Danger	ATP CLP00	9,9 - <19 %
CAS: 1310-66-3 EC: 215-183-4 Index: Non-applicable REACH 01-2119560576-31-XXX	Regulation 1272/2008 Acute Tox. 4: H302; Skin Corr. 1B: H314 - Danger	Self-classified	0,9 - <2,4 %
CAS: 95-63-6 EC: 202-436-9 Index: 601-043-00-3 REACH 01-2119472135-42-XXX	Regulation 1272/2008 Acute Tox. 4: H332; Aquatic Chronic 2: H411; Eye Irrit. 2: H319; Flam. Liq. 3: H226; Skin Irrit. 2: H315; STOT SE 3: H335 - Warning	ATP CLP00	0,24 - <0,9
CAS: 108-67-8 EC: 203-604-4 Index: 601-025-00-5 REACH Non-applicable	Mesitylene <sup>2</sup> Regulation 1272/2008 Aquatic Chronic 2: H411; Flam. Liq. 3: H226; STOT SE 3: H335 - Warning	ATP CLP00	0,24 - <0,9
CAS: 100-41-4 EC: 202-849-4 Index: 601-023-00-4 REACH 01-2119489370-35-XXX	Ethylbenzene <sup>2</sup> Regulation 1272/2008 Acute Tox. 4: H332; Asp. Tox. 1: H304; Flam. Liq. 2: H225; STOT RE 2: H373 - Danger	ATP ATP06	<0,09 %

<sup>&</sup>lt;sup>1</sup> Substances presenting a health or environmental hazard which meet criteria laid down in Regulation (EU) No. 2015/830

To obtain more information on the risk of the substances consult sections 8, 11, 12, 15 and 16.

# **SECTION 4: FIRST AID MEASURES**

# 4.1 Description of first aid measures:

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.

# By inhalation:

Remove the person affected from the area of exposure, provide with fresh air and keep at rest. In serious cases such as cardiorespiratory failure, artificial resuscitation techniques will be necessary (mouth to mouth resuscitation, cardiac massage, oxygen supply, etc.) requiring immediate medical assistance.

### By skin contact:

Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.

## By eye contact:

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<sup>\*\*</sup> Changes with regards to the previous version

<sup>&</sup>lt;sup>2</sup> Substance with a Union workplace exposure limit

<sup>\*\*</sup> Changes with regards to the previous version



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# SECTION 4: FIRST AID MEASURES (continued)

Rinse eyes thoroughly with lukewarm water for at least 15 minutes. Do not allow the person affected to rub or close their eyes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, as this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS of the product.

#### By ingestion/aspiration:

Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. Keep the person affected at rest. Rinse out the mouth and throat, as they may have been affected during ingestion.

#### 4.2 Most important symptoms and effects, both acute and delayed:

Acute and delayed effects are indicated in sections 2 and 11.

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

Non-applicable

# **SECTION 5: FIREFIGHTING MEASURES**

#### 5.1 Extinguishing media:

If possible use polyvalent powder fire extinguishers (ABC powder), alternatively use foam or carbon dioxide extinguishers (CO2). IT IS RECOMMENDED NOT to use tap water as an extinguishing agent.

#### 5.2 Special hazards arising from the substance or mixture:

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

#### 5.3 Advice for firefighters:

Depending on the magnitude of the fire it may be necessary to use full protective clothing and individual respiratory equipment. Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...) in accordance with Directive 89/654/EC.

#### **Additional provisions:**

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Destroy any source of ignition. In case of fire, refrigerate the storage containers and tanks for products susceptible to inflammation, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

# 6.1 Personal precautions, protective equipment and emergency procedures:

Isolate leaks provided that there is no additional risk for the people performing this task. Evacuate the area and keep out those without protection. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Above all prevent the formation of any vapour-air flammable mixtures, through either ventilation or the use of an inertization agent. Destroy any source of ignition. Eliminate electrostatic charges by interconnecting all the conductive surfaces on which static electricity could form, and also ensuring that all surfaces are connected to the ground.

# 6.2 Environmental precautions:

Avoid at all cost any type of spillage into an aqueous medium. Contain the product absorbed appropriately in hermetically sealed containers. Notify the relevant authority in case of exposure to the general public or the environment.

# 6.3 Methods and material for containment and cleaning up:

It is recommended:

Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.

## 6.4 Reference to other sections:

See sections 8 and 13.

# **SECTION 7: HANDLING AND STORAGE**

### 7.1 Precautions for safe handling:

A.- Precautions for safe manipulation



# MINOS TECH WHITE LITHIUM GREASE SPRAY - White lithium grease spray 24-086



# SECTION 7: HANDLING AND STORAGE (continued)

Comply with the current legislation concerning the prevention of industrial risks. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

B.- Technical recommendations for the prevention of fires and explosions

Avoid the evaporation of the product as it contains flammable substances, which could form flammable vapour/air mixtures in the presence of sources of ignition. Control sources of ignition (mobile phones, sparks,...) and transfer at slow speeds to avoid the creation of electrostatic charges. Avoid projections and pulverizations. Consult section 10 for conditions and materials that should be avoided.

C.- Technical recommendations to prevent ergonomic and toxicological risks

PREGNANT WOMEN SHOULD NOT BE EXPOSED TO THIS PRODUCT. Transfer in fixed places that comply with the necessary security conditions (emergency showers and eyewash stations in close proximity), using personal protection equipment, especially on the hands and face (See section 8). Limit manual transfers to containers of small amounts. Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

D.- Technical recommendations to prevent environmental risks

Due to the danger of this product for the environment it is recommended to use it within an area containing contamination control barriers in case of spillage, as well as having absorbent material in close proximity.

# 7.2 Conditions for safe storage, including any incompatibilities:

A.- Technical measures for storage

Minimum Temp.: 5 °C

Maximum Temp.: 35 °C

Maximum time: 12 Months

B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

#### 7.3 Specific end use(s):

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

#### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1 Control parameters:

Substances whose occupational exposure limits have to be monitored in the work environment

Identification	Environmental limits		
N-hexane	IOELV (8h)	20 ppm	72 mg/m <sup>3</sup>
CAS: 110-54-3	IOELV (STEL)		
EC: 203-777-6	Year	2017	<u>'</u>
1,2,4-trimethylbenzene	IOELV (8h)	20 ppm	100 mg/m <sup>3</sup>
CAS: 95-63-6	IOELV (STEL)		
EC: 202-436-9	Year	2017	<u>'</u>
Mesitylene	IOELV (8h)	20 ppm	100 mg/m <sup>3</sup>
CAS: 108-67-8	IOELV (STEL)		
EC: 203-604-4	Year	2017	<u>'</u>
Ethylbenzene	IOELV (8h)	100 ppm	442 mg/m <sup>3</sup>
CAS: 100-41-4	IOELV (STEL)	200 ppm	884 mg/m <sup>3</sup>
EC: 202-849-4	Year	2017	<u>'</u>

#### **DNEL (Workers):**

		SHOLL	Snort exposure		exposure
Identification		Systemic	Local	Systemic	Local
N-hexane	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 110-54-3	Dermal	Non-applicable	Non-applicable	11 mg/kg	Non-applicable
EC: 203-777-6	Inhalation	Non-applicable	Non-applicable	75 mg/m³	Non-applicable
Lithium hydroxide monohydrated	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 1310-66-3	Dermal	100 mg/kg	Non-applicable	41,35 mg/kg	Non-applicable
EC: 215-183-4	Inhalation	30 mg/m <sup>3</sup>	Non-applicable	10 mg/m <sup>3</sup>	Non-applicable

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# SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

		Short	Short exposure		exposure
Identification		Systemic	Local	Systemic	Local
1,2,4-trimethylbenzene	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 95-63-6	Dermal	Non-applicable	Non-applicable	16171 mg/kg	Non-applicable
EC: 202-436-9	Inhalation	100 mg/m <sup>3</sup>	100 mg/m <sup>3</sup>	100 mg/m <sup>3</sup>	100 mg/m <sup>3</sup>
Mesitylene	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 108-67-8	Dermal	Non-applicable	Non-applicable	16171 mg/kg	Non-applicable
EC: 203-604-4	Inhalation	100 mg/m <sup>3</sup>	100 mg/m <sup>3</sup>	100 mg/m <sup>3</sup>	100 mg/m <sup>3</sup>
Ethylbenzene	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 100-41-4	Dermal	Non-applicable	Non-applicable	180 mg/kg	Non-applicable
EC: 202-849-4	Inhalation	Non-applicable	293 mg/m <sup>3</sup>	77 mg/m³	Non-applicable

# DNEL (General population):

		Short	exposure	Long exposure	
Identification		Systemic	Local	Systemic	Local
N-hexane	Oral	Non-applicable	Non-applicable	4 mg/kg	Non-applicable
CAS: 110-54-3	Dermal	Non-applicable	Non-applicable	5,3 mg/kg	Non-applicable
EC: 203-777-6	Inhalation	Non-applicable	Non-applicable	16 mg/m <sup>3</sup>	Non-applicable
Lithium hydroxide monohydrated	Oral	12,4 mg/kg	Non-applicable	4,13 mg/kg	Non-applicable
CAS: 1310-66-3	Dermal	Non-applicable	Non-applicable	41,35 mg/kg	Non-applicable
EC: 215-183-4	Inhalation	Non-applicable	Non-applicable	3,42 mg/m <sup>3</sup>	Non-applicable
1,2,4-trimethylbenzene	Oral	Non-applicable	Non-applicable	15 mg/kg	Non-applicable
CAS: 95-63-6	Dermal	Non-applicable	Non-applicable	9512 mg/kg	Non-applicable
EC: 202-436-9	Inhalation	29,4 mg/m <sup>3</sup>	29,4 mg/m <sup>3</sup>	29,4 mg/m <sup>3</sup>	29,4 mg/m <sup>3</sup>
Mesitylene	Oral	Non-applicable	Non-applicable	15 mg/kg	Non-applicable
CAS: 108-67-8	Dermal	Non-applicable	Non-applicable	9512 mg/kg	Non-applicable
EC: 203-604-4	Inhalation	29,4 mg/m³	29,4 mg/m <sup>3</sup>	29,4 mg/m <sup>3</sup>	29,4 mg/m <sup>3</sup>
Ethylbenzene	Oral	Non-applicable	Non-applicable	1,6 mg/kg	Non-applicable
CAS: 100-41-4	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
EC: 202-849-4	Inhalation	Non-applicable	Non-applicable	15 mg/m <sup>3</sup>	Non-applicable

# PNEC:

Identification				
Lithium hydroxide monohydrated	STP	79,2 mg/L	Fresh water	2,3 mg/L
CAS: 1310-66-3	Soil	0,45 mg/kg	Marine water	0,23 mg/L
EC: 215-183-4	Intermittent	0,344 mg/L	Sediment (Fresh water)	9 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,9 mg/kg
1,2,4-trimethylbenzene	STP	2,41 mg/L	Fresh water	0,12 mg/L
CAS: 95-63-6	Soil	2,34 mg/kg	Marine water	0,12 mg/L
EC: 202-436-9	Intermittent	0,12 mg/L	Sediment (Fresh water)	13,56 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	13,56 mg/kg
Mesitylene	STP	2,02 mg/L	Fresh water	0,101 mg/L
CAS: 108-67-8	Soil	1,34 mg/kg	Marine water	0,101 mg/L
EC: 203-604-4	Intermittent	0,101 mg/L	Sediment (Fresh water)	7,86 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	7,86 mg/kg
Ethylbenzene	STP	9,6 mg/L	Fresh water	0,1 mg/L
CAS: 100-41-4	Soil	2,68 mg/kg	Marine water	0,01 mg/L
EC: 202-849-4	Intermittent	0,1 mg/L	Sediment (Fresh water)	13,7 mg/kg
	Oral	20 g/kg	Sediment (Marine water)	1,37 mg/kg

# 8.2 Exposure controls:

A.- General security and hygiene measures in the work place

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# SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

In accordance with the order of importance to control professional exposure (Directive 98/24/EC) it is recommended to use localized extraction in the work area as a collective protection measure to avoid exceeding the professional exposure limits. In case of using individual protection equipment they should have the CE marking in accordance with Directive 89/686/EC. For more information on Personal Protection Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For additional information see subsection 7.1.

All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

#### B.- Respiratory protection

The use of protection equipment will be necessary if a mist forms or if the occupational exposure limits are exceeded.

#### C.- Specific protection for the hands

Pictogram	PPE	Labelling	CEN Standard	Remarks
Mandatory hand protection	Protective gloves against minor risks	CATI		Replace gloves in case of any sign of damage. For prolonged periods of exposure to the product for professional users/industrials, we recommend using CE III gloves in line with standards EN 420 and EN 374.

As the product is a mixture of several substances, the resistance of the glove material can not be calculated in advance with total reliability and has therefore to be checked prior to the application

#### D.- Ocular and facial protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
Mandatory face protection	Panoramic glasses against splash/projections.	CAT II	EN 166:2001 EN ISO 4007:2012	Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing.

#### E.- Bodily protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
	Work clothing	CATI		Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended, in accordance with the regulations in EN ISO 6529:2001, EN ISO 6530:2005, EN ISO 13688:2013, EN 464:1994.
	Anti-slip work shoes	CATII	EN ISO 20347:2012	Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended, in accordance with the regulations in EN ISO 20345 y EN 13832-1

### F.- Additional emergency measures

Emergency measure	Standards	Emergency measure	Standards
Emergency shower	ANSI Z358-1 ISO 3864-1:2002	Eyewash stations	DIN 12 899 ISO 3864-1:2002

#### **Environmental exposure controls:**

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D

## Volatile organic compounds:

With regard to Directive 2010/75/EU, this product has the following characteristics:

V.O.C. (Supply): 68,88 % weight

V.O.C. density at 20 °C: 564,82 kg/m<sup>3</sup> (564,82 g/L)

Average carbon number: 10,23

Average molecular weight: 145,18 g/mol

With regard to Directive 2004/42/EC, this product which is ready to use has the following characteristics:

V.O.C. density at 20 °C: 564,82 kg/m³ (564,82 g/L)

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# SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

EUlimit for the product (Cat. B.E): 840 g/L (2010)

Components: Non-applicable

# SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties:

For complete information see the product datasheet.

Appearance:

Physical state at 20 °C:

Appearance:

Colour:

Colour:

Characteristic

Odour threshold:

Aerosol

Transparent

Colourless

Characteristic

Non-applicable \*

**Volatility:** 

Boiling point at atmospheric pressure:

Vapour pressure at 20 °C:

Vapour pressure at 50 °C:

Vapour pressure at 50 °C:

Vapour pressure at 50 °C:

Non-applicable \*

Non-applicable \*

**Product description:** 

Density at 20 °C:

Relative density at 20 °C:

Non-applicable \*

Concentration: 850 g/L (active ingredient)

Non-applicable \* pH: Non-applicable \* Vapour density at 20 °C: Partition coefficient n-octanol/water 20 °C: Non-applicable \* Solubility in water at 20 °C: Non-applicable \* Solubility properties: Non-applicable \* Decomposition temperature: Non-applicable \* Melting point/freezing point: Non-applicable \* Recipient pressure: Non-applicable \* Explosive properties: Non-applicable \* Oxidising properties: Non-applicable \*

Flammability:

Flash Point:

Flammability (solid, gas):

Autoignition temperature:

Lower flammability limit:

Upper flammability limit:

-104 °C (Propellant)

Non-applicable \*

Non-applicable \*

**Explosive:** 

Lower explosive limit: Non-applicable \*
Upper explosive limit: Non-applicable \*

9.2 Other information:

\*Not relevant due to the nature of the product, not providing information property of its hazards.

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## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

Surface tension at 20 °C:

Refraction index:

Non-applicable \*

Non-applicable \*

\*Not relevant due to the nature of the product, not providing information property of its hazards.

#### SECTION 10: STABILITY AND REACTIVITY

#### 10.1 Reactivity:

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7.

#### 10.2 Chemical stability:

Chemically stable under the conditions of storage, handling and use.

#### 10.3 Possibility of hazardous reactions:

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

#### 10.4 Conditions to avoid:

Applicable for handling and storage at room temperature:

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Not applicable	Not applicable	Risk of combustion	Avoid direct impact	Not applicable

#### 10.5 Incompatible materials:

Acids	Water	Combustive materials	Combustible materials	Others
Avoid strong acids	Not applicable	Avoid direct impact	Not applicable	Not applicable

#### 10.6 Hazardous decomposition products:

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO2), carbon monoxide and other organic compounds.

#### **SECTION 11: TOXICOLOGICAL INFORMATION**

# 11.1 Information on toxicological effects:

The experimental information related to the toxicological properties of the product itself is not available

# Dangerous health implications:

In case of exposure that is repetitive, prolonged or at concentrations higher than recommended by the occupational exposure limits, it may result in adverse effects on health depending on the means of exposure:

- A.- Ingestion (acute effect):
  - Acute toxicity: Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for consumption. For more information see section 3.
  - Corrosivity/Irritability: The consumption of a considerable dose can cause irritation in the throat, abdominal pain, nausea and vomiting.
- B- Inhalation (acute effect):
  - Acute toxicity: Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for inhalation. For more information see section 3.
  - Corrosivity/Irritability: Based on available data, the classification criteria are not met, however it does contain substances classified as dangerous for this effect. For more information see section 3.
- C- Contact with the skin and the eyes (acute effect):
  - Contact with the skin: Produces skin inflammation.
  - Contact with the eyes: Produces eye damage after contact.
- D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):
  - Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for the effects mentioned. For more information see section 3.
  - Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
  - Reproductive toxicity: Suspected of damaging fertility.

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# SECTION 11: TOXICOLOGICAL INFORMATION (continued)

#### E- Sensitizing effects:

- Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous with sensitising effects. For more information see section 3.
- Cutaneous: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- F- Specific target organ toxicity (STOT) single exposure:

Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for inhalation. For more information see section 3.

- G- Specific target organ toxicity (STOT)-repeated exposure:
  - Specific target organ toxicity (STOT)-repeated exposure: Exposure in high concentration can cause a breakdown in the central nervous system causing headache, dizziness, vertigo, nausea, vomiting, confusion, and in serious cases, loss of consciousness.
  - Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

# H- Aspiration hazard:

Based on available data, the classification criteria are not met, however it does contain substances classified as dangerous for this effect. For more information see section 3.

#### Other information:

Non-applicable

#### Specific toxicology information on the substances:

Identification	Α	cute toxicity	Genus
N-hexane	LD50 oral	5100 mg/kg	Mouse
CAS: 110-54-3	LD50 dermal	3000 mg/kg	Rabbit
EC: 203-777-6	LC50 inhalation	Non-applicable	
Lithium hydroxide monohydrated	LD50 oral	363 mg/kg	Rat
CAS: 1310-66-3	LD50 dermal	Non-applicable	
EC: 215-183-4	LC50 inhalation	Non-applicable	
1,2,4-trimethylbenzene	LD50 oral	3400 mg/kg	Rat
CAS: 95-63-6	LD50 dermal	3160 mg/kg	Rabbit
EC: 202-436-9	LC50 inhalation	11 mg/L (4 h)	Rat
Mesitylene	LD50 oral	6000 mg/kg	Rat
CAS: 108-67-8	LD50 dermal	Non-applicable	
EC: 203-604-4	LC50 inhalation	Non-applicable	
Ethylbenzene	LD50 oral	3500 mg/kg	Rat
CAS: 100-41-4	LD50 dermal	15354 mg/kg	Rabbit
EC: 202-849-4	LC50 inhalation	17,2 mg/L (4 h)	Rat

#### **SECTION 12: ECOLOGICAL INFORMATION**

The experimental information related to the eco-toxicological properties of the product itself is not available

## 12.1 Toxicity:

Identification	Acute toxicity		Species	Genus
N-hexane	LC50	4 mg/L (96 h)	Carassius auratus	Fish
CAS: 110-54-3	EC50	Non-applicable		
EC: 203-777-6	EC50	Non-applicable		
Lithium hydroxide monohydrated	LC50	109 mg/L (96 h)	Danio rerio	Fish
CAS: 1310-66-3	EC50	Non-applicable		
EC: 215-183-4	EC50	Non-applicable		
1,2,4-trimethylbenzene	LC50	7.72 mg/L (96 h)	Pimephales promelas	Fish
CAS: 95-63-6	EC50	6.14 mg/L (48 h)	Daphnia magna	Crustacean
EC: 202-436-9	EC50	Non-applicable		



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# SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification		Acute toxicity	Species	Genus
Mesitylene	LC50	12.5 mg/L (96 h)	Carassius auratus	Fish
CAS: 108-67-8	EC50	50 mg/L (24 h)	Daphnia magna	Crustacean
EC: 203-604-4	EC50	53 mg/L (48 h)	Scenedesmus subspicatus	Algae
Ethylbenzene	LC50	42.3 mg/L (96 h)	Pimephales promelas	Fish
CAS: 100-41-4	EC50	75 mg/L (48 h)	Daphnia magna	Crustacean
EC: 202-849-4	EC50	63 mg/L (3 h)	Chlorella vulgaris	Algae

# 12.2 Persistence and degradability:

Identification	Degradability		Biodegradal	oility
N-hexane	BOD5	Non-applicable	Concentration	100 mg/L
CAS: 110-54-3	COD	Non-applicable	Period	14 days
EC: 203-777-6	BOD5/COD	Non-applicable	% Biodegradable	100 %
1,2,4-trimethylbenzene	BOD5	Non-applicable	Concentration	100 mg/L
CAS: 95-63-6	COD	Non-applicable	Period	28 days
EC: 202-436-9	BOD5/COD	0.43	% Biodegradable	18 %
Mesitylene	BOD5	Non-applicable	Concentration	100 mg/L
CAS: 108-67-8	COD	Non-applicable	Period	14 days
EC: 203-604-4	BOD5/COD	Non-applicable	% Biodegradable	0 %
Ethylbenzene	BOD5	Non-applicable	Concentration	100 mg/L
CAS: 100-41-4	COD	Non-applicable	Period	14 days
EC: 202-849-4	BOD5/COD	Non-applicable	% Biodegradable	90 %

# 12.3 Bioaccumulative potential:

Identification	Bioaccur	nulation potential
Distillates (petroleum), hydrotreated light	BCF	130
CAS: 64742-47-8	Pow Log	3.3
EC: 265-149-8	Potential	High
N-hexane N-hexane	BCF	542
CAS: 110-54-3	Pow Log	3.9
EC: 203-777-6	Potential	High
1,2,4-trimethylbenzene	BCF	154
CAS: 95-63-6	Pow Log	3.78
EC: 202-436-9	Potential	High
Mesitylene	BCF	182
CAS: 108-67-8	Pow Log	3.42
EC: 203-604-4	Potential	High
Ethylbenzene	BCF	1
CAS: 100-41-4	Pow Log	3.15
EC: 202-849-4	Potential	Low

# 12.4 Mobility in soil:

Identification	Absorp	Absorption/desorption		Volatility	
N-hexane	Кос	150	Henry	185425 Pa·m³/mol	
CAS: 110-54-3	Conclusion	High	Dry soil	Yes	
EC: 203-777-6	Surface tension	1,798E-2 N/m (25 °C)	Moist soil	Yes	
1,2,4-trimethylbenzene	Кос	537	Henry	624,16 Pa·m³/mol	
CAS: 95-63-6	Conclusion	Low	Dry soil	Yes	
EC: 202-436-9	Surface tension	2,919E-2 N/m (25 °C)	Moist soil	Yes	
Mesitylene	Кос	1445	Henry	888,62 Pa·m³/mol	
CAS: 108-67-8	Conclusion	Low	Dry soil	Yes	
EC: 203-604-4	Surface tension	2,805E-2 N/m (25 °C)	Moist soil	Yes	
Ethylbenzene	Кос	520	Henry	798,44 Pa·m³/mol	
CAS: 100-41-4	Conclusion	Moderate	Dry soil	Yes	
EC: 202-849-4	Surface tension	2,859E-2 N/m (25 °C)	Moist soil	Yes	

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# SECTION 12: ECOLOGICAL INFORMATION (continued)

#### 12.5 Results of PBT and vPvB assessment:

Product fails to meet PBT/vPvB criteria

#### 12.6 Other adverse effects:

Not described

# **SECTION 13: DISPOSAL CONSIDERATIONS**

#### 13.1 Waste treatment methods:

Code	Description	Waste class (Regulation (EU) No 1357/2014)
16 05 04*	Gases in pressure containers (including halons) containing dangerous substances	Dangerous

#### Type of waste (Regulation (EU) No 1357/2014):

HP14 Ecotoxic, HP3 Flammable, HP5 Specific Target Organ Toxicity (STOT)/Aspiration Toxicity, HP10 Toxic for reproduction

#### Waste management (disposal and evaluation):

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2014/955/EC) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. We do not recommended disposal down the drain. See paragraph 6.2.

#### Regulations related to waste management:

In accordance with Annex II of Regulation (EC)  $n^{o}1907/2006$  (REACH) the community or state provisions related to waste management are stated

Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014

# SECTION 14: TRANSPORT INFORMATION

# Transport of dangerous goods by land:

With regard to ADR 2017 and RID 2017:



**14.1 UN number:** UN1950

**14.2 UN proper shipping name:** AEROSOLS, flammable

**14.3** Transport hazard class(es): 2 Labels: 2.1

**14.4 Packing group:** N/A **14.5 Environmental hazards:** No

14.6 Special precautions for user

Special regulations: 190, 327, 344, 625

Tunnel restriction code: D

Physico-Chemical properties: see section 9

Limited quantities: 1 l

14.7 Transport in bulk according to Non-applicable

Annex II of Marpol and the

**IBC Code:** 

### Transport of dangerous goods by sea:

With regard to IMDG 38-16:

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# SECTION 14: TRANSPORT INFORMATION (continued)

**14.1 UN number:** UN1950

**14.2 UN proper shipping name:** AEROSOLS, flammable

14.3 Transport hazard class(es): 2

 Labels: 2.1

 14.4 Packing group: N/A
 14.5 Environmental hazards: No

14.6 Special precautions for user

Special regulations: 63, 959, 190, 277, 327, 344

EmS Codes: F-D, S-U
Physico-Chemical properties: see section 9
Limited quantities: 1 L

14.7 Transport in bulk according to Non-applicable

Annex II of Marpol and the IBC Code:

#### Transport of dangerous goods by air:

With regard to IATA/ICAO 2017:



**14.1 UN number:** UN1950

**14.2 UN proper shipping name:** AEROSOLS, flammable

**14.3** Transport hazard class(es): 2
Labels: 2.1

14.4 Packing group: N/A14.5 Environmental hazards: No

14.6 Special precautions for user

Physico-Chemical properties: see section 9

14.7 Transport in bulk according to Non-applicable Annex II of Marpol and the

IBC Code:

# SECTION 15: REGULATORY INFORMATION

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

Candidate substances for authorisation under the Regulation (EC) 1907/2006 (REACH): Non-applicable

Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Non-applicable

Regulation (EC) 1005/2009, about substances that deplete the ozone layer: Non-applicable

Article 95, REGULATION (EU) No 528/2012: Non-applicable

REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Non-applicable

Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII REACH, etc ....):

Non-applicable

# Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as data used in a risk evaluation of the local circumstances in order to establish the necessary risk prevention measures for the manipulation, use, storage and disposal of this product.

## Other legislation:

The product could be affected by sectorial legislation

Council Directive 75/324/EEC of 20 May 1975 on the approximation of the laws of the Member States relating to aerosol dispensers Commission Directive 94/1/EC of 6 January 1994 adapting some technicalities of Council Directive 75/324/EEC on the approximation of the laws of the relating Member States to aerosol dispensers

Commission Directive 2008/47/EC of 8 April 2008 amending, for the purposes of adapting to technical progress, Council Directive 75/324/EEC on the approximation of the laws of the Member States relating to aerosol dispensers

Commission Directive 2013/10/EU of 19 March 2013 amending Council Directive 75/324/EEC on the approximation of the laws of the Member States relating to aerosol dispensers in order to adapt its labelling provisions to Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures

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# SECTION 15: REGULATORY INFORMATION (continued)

#### 15.2 Chemical safety assessment:

The supplier has not carried out evaluation of chemical safety.

#### SECTION 16: OTHER INFORMATION \*\*

#### Legislation related to safety data sheets:

This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) No 1907/2006 (Regulation (EC) No 2015/830)

#### Modifications related to the previous Safety Data Sheet which concerns the ways of managing risks.:

COMPOSITION/INFORMATION ON INGREDIENTS (SECTION 3):

· Removed substances

Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts (68649-42-3)

CLP Regulation (EC) nº 1272/2008 (SECTION 2, SECTION 16):

- · Hazard statements
- · Precautionary statements

Content of the 3rd section presenting modifications (SECTION 3):

- · Lithium hydroxide monohydrated (1310-66-3): R Phrases, Hazard statements
- · Mesitylene (108-67-8): RÉACH Number

#### Texts of the legislative phrases mentioned in section 2:

- H315: Causes skin irritation
- H373: May cause damage to organs through prolonged or repeated exposure
- H412: Harmful to aquatic life with long lasting effects
- H361f: Suspected of damaging fertility.
- H229: Pressurised container: May burst if heated
- H222: Extremely flammable aerosol
- H319: Causes serious eye irritation

### Texts of the legislative phrases mentioned in section 3:

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

## CLP Regulation (EC) no 1272/2008:

Acute Tox. 4: H302 - Harmful if swallowed

Acute Tox. 4: H332 - Harmful if inhaled

Aquatic Chronic 2: H411 - Toxic to aquatic life with long lasting effects

Asp. Tox. 1: H304 - May be fatal if swallowed and enters airways

Eye Irrit. 2: H319 - Causes serious eye irritation

Flam. Liq. 2: H225 - Highly flammable liquid and vapour

Flam. Liq. 3: H226 - Flammable liquid and vapour

Repr. 2: H361f - Suspected of damaging fertility.

Skin Corr. 1B: H314 - Causes severe skin burns and eye damage

Skin Irrit. 2: H315 - Causes skin irritation

STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure

STOT SE 3: H335 - May cause respiratory irritation

STOT SE 3: H336 - May cause drowsiness or dizziness

### Classification procedure:

Skin Irrit. 2: Calculation method

STOT RE 2: Calculation method

Aquatic Chronic 3: Calculation method

Repr. 2: Calculation method

Aerosol 1: Calculation method

Aerosol 1: Calculation method

Eye Irrit. 2: Calculation method

#### Advice related to training:

Minimal training is recommended to prevent industrial risks for staff using this product, in order to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

#### Principal bibliographical sources:

http://echa.europa.eu

http://eur-lex.europa.eu

# **Abbreviations and acronyms:**

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# SECTION 16: OTHER INFORMATION \*\* (continued)

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

IMDG: International maritime dangerous goods code IATA: International Air Transport Association ICAO: International Civil Aviation Organisation

COD: Chemical Oxygen Demand

BOD5: 5-day biochemical oxygen demand BCF: Bioconcentration factor

LD50: Lethal Dose 50 LC50: Lethal Concentration 50 EC50: Effective concentration 50

Log-POW: Octanol—water partition coefficient Koc: Partition coefficient of organic carbon



<sup>\*\*</sup> Changes with regards to the previous version

The information contained in this safety data sheet is based on sources, technical knowledge and current legislation at European and state level, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.