

## Safety Data Sheet

According to Annex II to REACH - Regulation 2015/830

### SECTION 1. Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Code: 411 00 05600-2641-5 L  
411 00 05800-2643-20L  
Product name: LIQUID ENGINE WASHER

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

Intended use: Solvent-based detergent for washing engine blocks

#### 1.3. Details of the supplier of the safety data sheet

Name: Meccanocar Italia S.r.l.  
Full address: Via San Francesco, 22  
District and Country: 56033 Capannoli (PI)  
Italy

Tel. +39 0587 609433

Fax +39 0587 607145

e-mail address of the competent person

responsible for the Safety Data Sheet: [moreno.meini@meccanocar.it](mailto:moreno.meini@meccanocar.it)

#### 1.4. Emergency telephone number

For urgent inquiries refer to: National Poisons Information Service: +44 121 507 4123

### SECTION 2. Hazards identification

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

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2015/830.

Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

#### Hazard classification and indication:

Aspiration hazard, category 1	H304	May be fatal if swallowed and enters airways.
Serious eye damage, category 1	H318	Causes serious eye damage.
Specific target organ toxicity - single exposure, category 3	H336	May cause drowsiness or dizziness.
Hazardous to the aquatic environment, chronic toxicity, category 2	H411	Toxic to aquatic life with long lasting effects.

#### 2.2. Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

## LIQUID ENGINE WASHER

Hazard pictograms:



Signal words:

Danger

Hazard statements:

<b>H304</b>	May be fatal if swallowed and enters airways.
<b>H318</b>	Causes serious eye damage.
<b>H336</b>	May cause drowsiness or dizziness.
<b>H411</b>	Toxic to aquatic life with long lasting effects.
<b>EUH066</b>	Repeated exposure may cause skin dryness or cracking.

Precautionary statements:

<b>P331</b>	Do NOT induce vomiting.
<b>P280</b>	Wear protective gloves/ protective clothing / eye protection / face protection.
<b>P301+P310</b>	IF SWALLOWED: immediately call a POISON CENTER / doctor.
<b>P261</b>	Avoid breathing dust / fume / gas / mist / vapours / spray.
<b>P273</b>	Avoid release to the environment.
<b>P305+P351+P338</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
<b>P310</b>	Immediately call a POISON CENTER / doctor.
<b>P312</b>	Call a POISON CENTRE / doctor if you feel unwell.
<b>P391</b>	Collect spillage.
<b>P501</b>	Dispose of contents / container in accordance with local regulations.

<b>Contains:</b>	HYDROCARBONS, C9-C11, N-ALCANS, ISOALKANS, CYCLES, <2% AROMATIC ALCOHOL C10, ETHOXYLATE
------------------	---

## 2.3. Other hazards

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

## SECTION 3. Composition/information on ingredients

## 3.2. Mixtures

Contains:

Identification	x = Conc. %	Classification 1272/2008 (CLP)
HYDROCARBONS, C9-C11, N-ALCANS, ISOALKANS, CYCLES, <2% AROMATIC		
CAS 64742-48-9	90 ≤ x < 94	Flam. Liq. 3 H226, Asp. Tox. 1 H304, STOT SE 3 H336, EUH066
EC 919-857-5		
INDEX -		
Reg. no. 01-2119463258-33-XXXX		
ALCOHOL C10, ETHOXYLATE		

## LIQUID ENGINE WASHER

CAS 26183-52-8

 $8 \leq x < 9$ 

Eye Irrit. 2 H319, Aquatic Acute 1 H400 M=1

EC 500-046-6

INDEX -

Reg. no. 01-2120825755-48-XXXX

The full wording of hazard (H) phrases is given in section 16 of the sheet.

**SECTION 4. First aid measures****4.1. Description of first aid measures**

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention immediately. Wash contaminated clothing before using it again.

INHALATION: Remove to open air. If the subject stops breathing, administer artificial respiration. Get medical advice/attention immediately.

INGESTION: Get medical advice/attention immediately. Do not induce vomiting. Do not administer anything not explicitly authorised by a doctor.

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

Specific information on symptoms and effects caused by the product are unknown.

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

Information not available

**SECTION 5. Firefighting measures****5.1. Extinguishing media****SUITABLE EXTINGUISHING EQUIPMENT**

Extinguishing substances are: carbon dioxide, foam, chemical powder. For product loss or leakage that has not caught fire, water spray can be used to disperse flammable vapours and protect those trying to stem the leak.

**UNSUITABLE EXTINGUISHING EQUIPMENT**

Do not use jets of water. Water is not effective for putting out fires but can be used to cool containers exposed to flames to prevent explosions.

**5.2. Special hazards arising from the substance or mixture****HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE**

Excess pressure may form in containers exposed to fire at a risk of explosion. Do not breathe combustion products.

**5.3. Advice for firefighters****GENERAL INFORMATION**

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

**SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS**

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

**SECTION 6. Accidental release measures**

**6.1. Personal precautions, protective equipment and emergency procedures**

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

Send away individuals who are not suitably equipped. Use explosion-proof equipment. Eliminate all sources of ignition (cigarettes, flames, sparks, etc.) from the leakage site.

**6.2. Environmental precautions**

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

**6.3. Methods and material for containment and cleaning up**

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

**6.4. Reference to other sections**

Any information on personal protection and disposal is given in sections 8 and 13.

**SECTION 7. Handling and storage****7.1. Precautions for safe handling**

Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Without adequate ventilation, vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid bunching of electrostatic charges. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat. Avoid leakage of the product into the environment.

**7.2. Conditions for safe storage, including any incompatibilities**

Store only in the original container. Store in a cool and well ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition. Keep containers away from any incompatible materials, see section 10 for details.

**7.3. Specific end use(s)**

Information not available

**SECTION 8. Exposure controls/personal protection****8.1. Control parameters****ALCOHOL C10, ETHOXYLATE**

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,292	mg/l
Normal value in marine water	0,029	mg/l
Normal value for fresh water sediment	31,92	mg/kg
Normal value for marine water sediment	3,19	mg/kg
Normal value of STP microorganisms	1,4	mg/l

## LIQUID ENGINE WASHER

Normal value for the terrestrial compartment

1

mg/kg

**Health - Derived no-effect level - DNEL / DMEL**

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				25 mg/kg bw/d				
Inhalation				87 mg/m3				294 mg/m3
Skin				1250 mg/kg bw/d				2080 mg/kg bw/d

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified.

**8.2. Exposure controls**

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.

**HAND PROTECTION**

Protect hands with category III work gloves (see standard EN 374).

The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

**SKIN PROTECTION**

Wear category I professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

Consider the appropriateness of providing antistatic clothing in the case of working environments in which there is a risk of explosion.

**EYE PROTECTION**

Wear airtight protective goggles (see standard EN 166).

**RESPIRATORY PROTECTION**

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

**ENVIRONMENTAL EXPOSURE CONTROLS**

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

HYDROCARBONS, C9-C11, N-ALCANS, ISOALKANS, CYCLES, <2% AROMATIC

Chemical resistant gloves are recommended. Nitrile, standards CEN EN 420 and EN 374 provide general requirements and lists of types of gloves.

ALCOHOL C10, ETHOXYLATE

## LIQUID ENGINE WASHER

Respiratory protection: personal respiratory protection devices are normally not required. In inadequately ventilated areas, where the workplace limits are exceeded, where unpleasant odors exist or where aerosols are present or smoke and fog occur, use a self-contained breathing apparatus or self-contained breathing apparatus with a type A filter or an appropriate combined filter (e.g. where aerosols or smoke and mist, A-P2 or ABEK-P2) are used, in accordance with EN 141.

Hand protection: the choice of an appropriate glove depends not only on its material but also on other quality characteristics and is different from one manufacturer to another. Observe the permeability and breakthrough time instructions provided by the supplier

gloves. Also take into consideration the specific local conditions in which the product is used, such as the danger of cuts, abrasions and contact times., Keep in mind that in daily use the durability of a chemical resistant protective glove can be considerably less than breakthrough time measured according to EN 374, due to numerous external influences (e.g. temperature).

gloves suitable for permanent contact: Material: butyl rubber; Permeation time: > = 480 min; Material thickness: > = 0.7 mm

gloves suitable for splash protection: Material: nitrile rubber / nitrile latex; Permeation time: > = 30 min; Material thickness: > = 0.4 mm

Eye protection: tight fitting safety glasses

Skin and body protection: protective suit

## SECTION 9. Physical and chemical properties

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

Appearance	clear liquid
Colour	colourless
Odour	characteristic
Odour threshold	Not available
pH	6-8
Melting point / freezing point	-5 °C
Initial boiling point	130 °C
Boiling range	210 °C
Flash point	> 36 °C
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Lower inflammability limit	Not available
Upper inflammability limit	Not available
Lower explosive limit	0,6 % (V/V)
Upper explosive limit	6,5 % (V/V)
Vapour pressure	0,3 kPa
Vapour density	>1 a 101 kPa
Relative density	0,791-0,851
Solubility	insoluble in water
Partition coefficient: n-octanol/water	Not available
Auto-ignition temperature	> 200 °C
Decomposition temperature	Not available
Viscosity	> 2 cst
Explosive properties	Not available
Oxidising properties	Not available

### 9.2. Other information

Information not available

## SECTION 10. Stability and reactivity

**10.1. Reactivity**

There are no particular risks of reaction with other substances in normal conditions of use.

**10.2. Chemical stability**

The product is stable in normal conditions of use and storage.

**10.3. Possibility of hazardous reactions**

The vapours may also form explosive mixtures with the air.

**10.4. Conditions to avoid**

Avoid overheating. Avoid bunching of electrostatic charges. Avoid all sources of ignition.

HYDROCARBONS, C9-C11, N-ALCANS, ISOALKANS, CYCLES, <2% AROMATIC

Avoid heat, sparks, open flames and other sources of ignition.

**10.5. Incompatible materials**

HYDROCARBONS, C9-C11, N-ALCANS, ISOALKANS, CYCLES, <2% AROMATIC

Strong oxidants

**10.6. Hazardous decomposition products**

In the event of thermal decomposition or fire, gases and vapours that are potentially dangerous to health may be released.

**SECTION 11. Toxicological information****11.1. Information on toxicological effects**Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

Information not available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Information not available

Interactive effects

Information not available

## LIQUID ENGINE WASHER

ACUTE TOXICITY

LC50 (Inhalation) of the mixture:  
Not classified (no significant component)  
LD50 (Oral) of the mixture:  
Not classified (no significant component)  
LD50 (Dermal) of the mixture:  
Not classified (no significant component)

HYDROCARBONS, C9-C11, N-ALCANS, ISOALKANS, CYCLES, <2% AROMATIC

Method: OECD 423  
Reliability: 2  
Species: Rat (Wistar; male / female)  
Route of exposure: Oral  
Results: LD50> 15 000 mg / kg bw  
Method: Equivalent or similar to OECD 403  
Reliability: 1  
Species: Rat (Crj; CD (SD); male / female)  
Route of exposure: Inhalation (vapors)  
Results: LC50> 4 951 mg / m<sup>3</sup> air  
Method: Equivalent or similar to OECD 402  
Reliability: 2  
Species: Rabbit (New Zealand White; male / female)  
Route of exposure: Dermal  
Results: LD50> 5 000 mg / kg bw

ALCOHOL C10, ETHOXYLATE

Method: OECD 401  
Reliability: 1  
Species: Rat (Sprague-Dawley; male / female)  
Route of exposure: Oral  
Results: LD50> 5050 mg / kg bw

SKIN CORROSION / IRRITATION

Repeated exposure may cause skin dryness or cracking.

HYDROCARBONS, C9-C11, N-ALCANS, ISOALKANS, CYCLES, <2% AROMATIC

Method: Equivalent or similar to OECD 404  
Reliability: 1  
Species: Rabbit (New Zealand White)  
Route of exposure: Dermal  
Results: Irritating

ALCOHOL C10, ETHOXYLATE

Method: OECD 404  
Reliability: 2  
Species: Rabbit (New Zealand White)  
Route of exposure: Dermal  
Results: Not classified

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye damage

## LIQUID ENGINE WASHER

HYDROCARBONS, C9-C11, N-ALCANS, ISOALKANS, CYCLES, <2% AROMATIC

Method: OECD 405

Reliability: 1

Species: Rabbit (New Zealand White)

Route of exposure: Ocular

Results: Not irritating

#### RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

Skin sensitization

HYDROCARBONS, C9-C11, N-ALCANS, ISOALKANS, CYCLES, <2% AROMATIC

Method: OECD 406

Reliability: 2

Species: guinea pig (Hartley; female)

Route of exposure: Dermal

Results: Not sensitizing

ALCOHOL C10, ETHOXYLATE

Method: OECD 406

Reliability: 1

Species: guinea pig (Dunkin-Hartley; female)

Route of exposure: Dermal

Results: Not classified

#### GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

HYDROCARBONS, C9-C11, N-ALCANS, ISOALKANS, CYCLES, <2% AROMATIC

Method: OECD 471 in vitro test

Reliability: 1

Species: S. typhimurium

Results: Negative with or without metabolic activation

Method: Equivalent or similar to OECD 474 in vivo test

Reliability: 1

Species: Mouse (CD-1; male / female)

Route of exposure: Oral

Results: Negative

ALCOHOL C10, ETHOXYLATE

Method: OECD 471-In vitro test

Reliability: 2

Species: S. typhimurium

Results: Negative with and without metabolic activation

Method: Equivalent or similar to OECD 475-Test in vivo

Reliability: 2

Species: Rat (Sprague-Dawley; male / female)

Route of exposure: Oral

Results: Negative

#### CARCINOGENICITY

Does not meet the classification criteria for this hazard class

**LIQUID ENGINE WASHER**

HYDROCARBONS, C9-C11, N-ALCANS, ISOALKANS, CYCLES, <2% AROMATIC

Method: Equivalent or similar to OECD 453

Reliability: 1

Species: Rat (F344 / N; male / female)

Route of exposure: Inhalation (vapors)

Results: NOAEC 138 mg / m<sup>3</sup> air

**REPRODUCTIVE TOXICITY**

Does not meet the classification criteria for this hazard class

Adverse effects on sexual function and fertility

HYDROCARBONS, C9-C11, N-ALCANS, ISOALKANS, CYCLES, <2% AROMATIC

Method: OECD TG 413

Reliability: 1

Species: Rat (Fischer 344; male / female)

Route of exposure: Inhalation (vapors)

Results: NOAEC> = 400 ppm

ALCOHOL C10, ETHOXYLATE

Method: Equivalent or similar to OECD 416

Reliability: 2

Species: Rat (Fischer 344; male / female)

Route of exposure: Dermal

Results: NOAEL (fertility)> = 250 mg / kg bw / day

Adverse effects on development of the offspring

ALCOHOL C10, ETHOXYLATE

Method: Equivalent or similar to OECD 416

Reliability: 2

Species: Rat (Fischer 344)

Route of exposure: Dermal

Results: NOAEL (development)> = 250 mg / kg bw / day

**STOT - SINGLE EXPOSURE**

May cause drowsiness or dizziness

HYDROCARBONS, C9-C11, N-ALCANS, ISOALKANS, CYCLES, <2% AROMATIC

Based on available data and through expert judgment, the substance is classified in the target organ toxicity class for single exposure.

ALCOHOL C10, ETHOXYLATE

Based on available data and by expert judgment, the substance is not classified in the toxicity class for single exposure bruising organs.

Route of exposure

HYDROCARBONS, C9-C11, N-ALCANS, ISOALKANS, CYCLES, <2% AROMATIC

Dermal and inhalation

**STOT - REPEATED EXPOSURE**

Does not meet the classification criteria for this hazard class

HYDROCARBONS, C9-C11, N-ALCANS, ISOALKANS, CYCLES, <2% AROMATIC

Method: Equivalent or similar to OECD 422

Reliability: 1

Species: Rat (Sprague-Dawley; male / female)

Route of exposure: Oral

Results: NOAEL> = 1000 mg / kg / day

Method: Equivalent or similar to OECD 413

Reliability: 1

Species: Rat (Albino; male / female)

Route of exposure: Inhalation (vapors)

Results: NOAEC 10186 mg / m3

ALCOHOL C10, ETHOXYLATE

Method: Equivalent or similar to OECD 408

Reliability: 2

Species: Rat (Wistar; male / female)

Route of exposure: Oral

Results: NOAEL> = 500 mg / kg bw / day

#### ASPIRATION HAZARD

Toxic for aspiration

## SECTION 12. Ecological information

This product is dangerous for the environment and is toxic for aquatic organisms. In the long term, it have negative effects on acquatic environment.

### 12.1. Toxicity

ALCOHOL C10, ETHOXYLATE

Manca la traduzione MEC CAS 26183-52-8 => (IEC AGG A). <=====(\*)

ALCOHOL C10, ETHOXYLATE

LC50 - for Fish 1,2 mg/l/96h

EC50 - for Crustacea > 3,72 mg/l/48h

EC50 - for Algae / Aquatic Plants 0,18 mg/l/72h

Chronic NOEC for Fish 0,28 mg/l

Chronic NOEC for Crustacea 1,75 mg/l

### 12.2. Persistence and degradability

Information not available

### 12.3. Bioaccumulative potential

Information not available

### 12.4. Mobility in soil

Information not available

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

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

**12.6. Other adverse effects**

Information not available

**SECTION 13. Disposal considerations****13.1. Waste treatment methods**

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

Waste transportation may be subject to ADR restrictions.

**CONTAMINATED PACKAGING**

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

**ALCOHOL C10, ETHOXYLATE**

It can be incinerated if it complies with local regulations.

**SECTION 14. Transport information****14.1. UN number**

ADR / RID, IMDG, 3295  
IATA:

**14.2. UN proper shipping name**

ADR / RID: HYDROCARBONS, LIQUID, N.O.S.  
IMDG: HYDROCARBONS, LIQUID, N.O.S.  
IATA: HYDROCARBONS, LIQUID, N.O.S.

**14.3. Transport hazard class(es)**

ADR / RID: Class: 3 Label: 3

IMDG: Class: 3 Label: 3

IATA: Class: 3 Label: 3

**14.4. Packing group**

ADR / RID, IMDG, III  
IATA:

14.5. Environmental hazards

ADR / RID: NO  
IMDG: NO  
IATA: NO

14.6. Special precautions for user

ADR / RID:	HIN - Kemler: 30	Limited Quantities: 5 L	Tunnel restriction code: (D/E)
IMDG:	Special Provision: - EMS: F-E, S-D	Limited Quantities: 5 L	
IATA:	Cargo:	Maximum quantity: 220 L	Packaging instructions: 366
	Pass.:	Maximum quantity: 60 L	Packaging instructions: 355
	Special Instructions:	A3, A324	

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Information not relevant

SECTION 15. Regulatory information

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

Seveso Category - Directive 2012/18/EC: E2

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

Product Point 3 - 40

Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage greater than 0,1%.

Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:

None

Substances subject to the Rotterdam Convention:

## LIQUID ENGINE WASHER

None

Substances subject to the Stockholm Convention:

None

Healthcare controls

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

### 15.2. Chemical safety assessment

A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3.

## SECTION 16. Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

<b>Flam. Liq. 3</b>	Flammable liquid, category 3
<b>Asp. Tox. 1</b>	Aspiration hazard, category 1
<b>Eye Dam. 1</b>	Serious eye damage, category 1
<b>Eye Irrit. 2</b>	Eye irritation, category 2
<b>STOT SE 3</b>	Specific target organ toxicity - single exposure, category 3
<b>Aquatic Acute 1</b>	Hazardous to the aquatic environment, acute toxicity, category 1
<b>Aquatic Chronic 2</b>	Hazardous to the aquatic environment, chronic toxicity, category 2
<b>H226</b>	Flammable liquid and vapour.
<b>H304</b>	May be fatal if swallowed and enters airways.
<b>H318</b>	Causes serious eye damage.
<b>H319</b>	Causes serious eye irritation.
<b>H336</b>	May cause drowsiness or dizziness.
<b>H400</b>	Very toxic to aquatic life.
<b>H411</b>	Toxic to aquatic life with long lasting effects.
<b>EUH066</b>	Repeated exposure may cause skin dryness or cracking.

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation

**LIQUID ENGINE WASHER**

- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

**GENERAL BIBLIOGRAPHY**

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
  2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
  3. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
  4. Regulation (EU) 2015/830 of the European Parliament
  5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
  6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
  7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
  8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
  9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
  10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
  11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
  12. Regulation (EU) 2016/1179 (IX Atp. CLP)
  13. Regulation (EU) 2017/776 (X Atp. CLP)
  14. Regulation (EU) 2018/669 (XI Atp. CLP)
  15. Regulation (EU) 2018/1480 (XIII Atp. CLP)
  16. Regulation (EU) 2019/521 (XII Atp. CLP)
- The Merck Index. - 10th Edition
  - Handling Chemical Safety
  - INRS - Fiche Toxicologique (toxicological sheet)
  - Patty - Industrial Hygiene and Toxicology
  - N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
  - IFA GESTIS website
  - ECHA website
  - Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

**Note for users:**

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

Product's classification is based on the calculation methods set out in Annex I of the CLP Regulation, unless otherwise indicated in sections 11 and 12.

The data for evaluation of chemical-physical properties are reported in section 9.

**Changes to previous review:**

The following sections were modified:

02 / 03 / 05 / 07 / 08 / 09 / 10 / 11 / 12 / 13 / 15 / 16.