Safety Data Sheet

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

1.1. Product identifier

Product name **UNI LBR 2000.04**

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

Intended use **Fuel lubricity improver**

1.3. Details of the supplier of the safety data sheet

Name **UNIservice UNISAFE Srl**

Full address **Via al Santuario di N.S. Guardia 58 a**

District and Country **16162 Genova Bolzaneto (GE)**
Italia

Tel. + 39 010 711395

Fax + 39 010 713120

e-mail address of the competent person responsible for the Safety Data Sheet **info@uniservicemarine.com**

1.4. Emergency telephone number

For urgent inquiries refer to **First Aid Information: Centro Antiveleni Milano - Niguarda**
Phone: 02 - 66101029 (specialized in chemical products poisoning).

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.

2.2. Label elements

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

Hazard pictograms:

Signal words: Danger

Hazard statements:

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

Precautionary statements:

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

Contains: HYDROCARBONS, C11-C14, n alkanes, isoalkanes, cyclic , <2% aromatic

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, C11-C14, n alkanes, isoalkanes, cyclic , <2% aromatic		
CAS 64742-47-8	15 ≤ x < 30	Asp. Tox. 1 H304, EUH066
EC 926-141-6		
INDEX -		
Reg. no. 01-2119456620-430000;012119456620-43		

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.

In all cases of doubt or if symptoms persist, seek medical attention.

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

None known

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

No data available.

SECTION 5. Firefighting measures

5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT
The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.
UNSUITABLE EXTINGUISHING EQUIPMENT
None in particular.

CO_2, dust or water spray. extinguish large fires with water spray.

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE
Do not breathe combustion products.

No data available.

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).

No data available.

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.

Respect safety measures governing the chemicals.

6.2. Environmental precautions

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

Do not let it flow into the municipal canalization

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.

In case of usual product, avoid the formation of dust. In case of liquid product contain and absorb the pouring with inert absorbent material.

6.4. Reference to other sections

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

No data available.

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Before handling the product, consult all the other sections of this material safety data sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat.

Handle following good industrial hygiene and adequate safety measures. Avoid contact and inhalation of vapors and / or powders.

7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Keep containers away from any incompatible materials, see section 10 for details.

Keep the container in a well-ventilated place.

7.3. Specific end use(s)

No data available.

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Regulatory References:

ITA	Italia	DIRETTIVA (UE) 2017/164 DELLA COMMISSIONE del 31 gennaio 2017

HYDROCARBONS, C11-C14, n alkanes, isoalkanes, cyclic , <2% aromatic
Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		
		mg/m3	ppm	mg/m3	ppm	
VLEP	ITA	1200	165			SKIN

Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

Tall oil CAS : 8002-26-4
Specification : DNEL (EC)
Parameter : Systemic effects_Long term_Dermal_Workers
Value : 10 mg / kg
Specification : DNEL (EC)
Parameter : Systemic effects_Lungo term_Inhalation_ Workers
Value : 35.3 mg /m3
Specification : DNEL (EC)
Parameter : Systemic effects_Long term_Dermal_ Population
Value : 5 mg / m3
Specification : DNEL (EC)
Parameter : Systemic effects_Lungo term_Inhalation_ Population
Value : 8.7 mg / m3
Specification : DNEL (EC)
Parameter : Systemic effects_Lungo term_Oral_ Population
Value : 5 mg / kg

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.

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 B 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.

Air the environment well. Observe the usual safety measures when handling chemicals.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	viscous liquid
Colour	yellow
Odour	odourless
Odour threshold	Not available
pH	Not available
Melting point / freezing point	Not available
Initial boiling point	> 300 °C
Boiling range	Not available
Flash point	> 180 °C
Evaporation Rate	Not available
Flammability of solids and gases	Not available
Lower inflammability limit	Not available
Upper inflammability limit	Not available
Lower explosive limit	Not available
Upper explosive limit	Not available
Vapour pressure	Not available
Vapour density	Not available
Relative density	0,9 - 1 g/cm3
Solubility	soluble in organic solvents
Partition coefficient: n-octanol/water	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	Not available

Explosive properties	Not available
Oxidising properties	not applicable

9.2. Other information

solubility	Insoluble in water

SECTION 10. Stability and reactivity

10.1. Reactivity

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

No dangerous reaction if stored and used properly.

10.2. Chemical stability

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

The product is stable under recommended storage and use conditions (see section 7).

10.3. Possibility of hazardous reactions

No hazardous reactions are foreseeable in normal conditions of use and storage.

No dangerous reaction if stored and used properly.

10.4. Conditions to avoid

None in particular. However the usual precautions used for chemical products should be respected.

Keep away from open flames, sparks and other sources of ignition.

10.5. Incompatible materials

Oxidizing agents.

10.6. Hazardous decomposition products

No dangerous decomposition products are known.

SECTION 11. Toxicological information

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.
It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

The product does not present risks to human health.

11.1. Information on toxicological effects

Specification : LD50 (Tall oil; CAS No.: 8002-26-4)
Recruitment : Oral.
Species for the test : Rat
Value :> 5000 mg / kg
Specification : LD50 (Tall oil; CAS No.: 8002-26-4)
Intake : Dermal
Species for the test : Rat
Value :> 2000 mg / kg
Specification : LD50 (fatty acids, tall oil, CAS No .: 61790-12-3)
Recruitment : Oral.
Species for the test : Rat
Value :> 2000 mg / kg

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

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, C11-C14, n alkanes, isoalkanes, cyclic , <2% aromatic

LD50 (Oral) > 5000 mg/kg rat

LD50 (Dermal) > 5000 mg/kg rabbit

LC50 (Inhalation) > 5000 mg/m3/8h rat

SKIN CORROSION / IRRITATION

Repeated exposure may cause skin dryness or cracking.

SERIOUS EYE DAMAGE / IRRITATION

Does not meet the classification criteria for this hazard class

RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

ASPIRATION HAZARD

Toxic for aspiration

SECTION 12. Ecological information

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation.

Use according to good working rules, avoiding to disperse the product in the environment.

12.1. Toxicity

HYDROCARBONS, C11-C14, n alkanes, isoalkanes, cyclic , <2% aromatic	
LC50 - for Fish	1000 mg/l/96h Oncorhynchus mykiss

EC50 - for Crustacea	1000 mg/l/48h Daphnia magna
EC50 - for Algae / Aquatic Plants	1000 mg/l/72h Pseudokirchneriella subcapitata

Aquatic toxicity.
Specification : EC50 (Tall oil; CAS No.: 8002-26-4)
Parameter : Bacteria - activated sludge.
Value :> 100 mg / l.
For the test : 3h
Specification : EL50 (Tall oil; CAS No.: 8002-26-4)
Parameter : Daphnia- Daphina magna
Value : 5000 - 10000 mg / l.
For the test : 48 h
Specification : EL50 (Tall oil; CAS No.: 8002-26-4)
Parameter : Algae - Scenedesmus subspicatus
Value : approx. 3300 mg / l.
For the test : 72 h
Specification : LL50 (Tall oil; CAS No.: 8002-26-4)
Parameter : Fish - Brachydanio rerio
Value :> 100 mg / l
For the test : 96 h
Specification : EC50 (fatty acids, tall oil; CAS No .: 61790-12-3)
Parameter : Daphina magna (large water flea)
Value :> 10000 mg / l.
For the test : 48h
Specification : EC50 (fatty acids, tall oil; CAS No .: 61790-12-3)
Parameter : Seaweed
Value :> 1000 mg / l.
For the test : 72h
Specification : EC50 (fatty acids, tall oil; CAS No .: 61790-12-3)
Parameter : Bacteria
Value :> 1000 mg / l.
For the test : 3h
Specification : LC50 (fatty acids, tall oil; CAS No .: 61790-12-3)
Parameter : Fish
Value :> 10000 mg / l.
For the test : 96h

12.2. Persistence and degradability

HYDROCARBONS, C11-C14, n alkanes,
isoalkanes, cyclic , <2% aromatic
Entirely degradable

Readily biodegradable,

12.3. Bioaccumulative potential

Information on the product is not available.

12.4. Mobility in soil

Mobility in the soil.

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%.

This product is not, or does not contain a PBT substance and vPVB

12.6. Other adverse effects

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

SECTION 14. Transport information

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.

14.1. UN number

Not applicable

14.2. UN proper shipping name

Not applicable

14.3. Transport hazard class(es)

Not applicable

14.4. Packing group

Not applicable

14.5. Environmental hazards

Not applicable

14.6. Special precautions for user

Not applicable

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: None

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

Product
Point 3

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:

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:

Asp. Tox. 1	Aspiration hazard, category 1
H304	May be fatal if swallowed and enters airways.
EUH066	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
- 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) 2018/1480 (XIII 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.