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

1.1 Product identifier
   Product name: LUB FOOD CHAIN OIL

1.2 Relevant identified uses of the substance or mixture and uses advised against
   Use of the Substance/Mixture: Lubricating oil
   Recommended restrictions on use: Restricted to professional users.

1.3 Details of the supplier of the safety data sheet
   NTN-SNR ROULEMENTS
   1, rue des Usines - BP 2017
   74000 ANNECY France
   Tél : +33 (0)4 50 65 30 00
   Fax : +33 (0)4 50 65 32 91
   E-mail address of person responsible for the SDS: fds@ntn-snr.fr
   Laboratory Service NTN-SNR Roulements

1.4 Emergency telephone number
   Emergency Tel. (Office hours) +33 (0)4 50 65 97 55
   Emergency Tel. (France) ORFILA (INRS) +33 (0)1 45 42 59 59
   Emergency Tel. (EU): 112 (Available 24 hours a day)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
   Classification (REGULATION (EC) No 1272/2008)
   Not a hazardous substance or mixture.
2.2 Label elements
Labelling (REGULATION (EC) No 1272/2008)
Not a hazardous substance or mixture.

2.3 Other hazards
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures
Chemical nature: Synthetic hydrocarbon oil ester oil

Hazardous components
Remarks: No hazardous ingredients

SECTION 4: First aid measures

4.1 Description of first aid measures
If inhaled: Remove person to fresh air. If signs/symptoms continue, get medical attention. Keep patient warm and at rest. If breathing is irregular or stopped, administer artificial respiration.

In case of skin contact: Remove contaminated clothing. If irritation develops, get medical attention. In case of contact, immediately flush skin with plenty of water.

In case of eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 10 minutes. If eye irritation persists, consult a specialist.

If swallowed: Move the victim to fresh air. Do NOT induce vomiting. Rinse mouth with water.

4.2 Most important symptoms and effects, both acute and delayed
Symptoms: No information available.
SECTION 5: Firefighting measures

5.1 Extinguishing media
Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media : High volume water jet

5.2 Special hazards arising from the substance or mixture
Specific hazards during firefighting : Fire may cause evolution of:
Carbon oxides

5.3 Advice for firefighters
Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment. Exposure to decomposition products may be a hazard to health.

Further information : Standard procedure for chemical fires.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Personal precautions : Evacuate personnel to safe areas. Use personal protective equipment. Refer to protective measures listed in sections 7 and 8.

6.2 Environmental precautions
Environmental precautions : Try to prevent the material from entering drains or water courses. Prevent further leakage or spillage if safe to do so. Local authorities should be advised if significant spillages cannot be contained.

6.3 Methods and material for containment and cleaning up
Methods for cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, ver-
6.4 Reference to other sections
For personal protection see section 8.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Advice on safe handling: For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Wash hands and face before breaks and immediately after handling the product.

Hygiene measures: Wash face, hands and any exposed skin thoroughly after handling.

7.2 Conditions for safe storage, including any incompatibilities
Requirements for storage areas and containers: Store in original container. Keep container closed when not in use. Keep in a dry, cool and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store in accordance with the particular national regulations. Keep in properly labelled containers.

7.3 Specific end use(s)
Specific use(s): Specific instructions for handling, not required.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters
Contains no substances with occupational exposure limit values.

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

<table>
<thead>
<tr>
<th>Substance name</th>
<th>End Use</th>
<th>Exposure routes</th>
<th>Potential health effects</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glycerides, mixed decanoyl and octanoyl</td>
<td>Workers</td>
<td>Inhalation</td>
<td>Long-term systemic effects</td>
<td>177.79 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Workers</td>
<td>Skin contact</td>
<td>Long-term systemic effects</td>
<td>43.84 mg/m³</td>
</tr>
</tbody>
</table>
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8.2 Exposure controls

Engineering measures
none

Personal protective equipment
Eye protection : Safety glasses with side-shields conforming to EN166

Hand protection
Material : Nitrile rubber
Protective index : Class 1

Remarks : For prolonged or repeated contact use protective gloves. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. The break through time depends amongst other things on the material, the thickness and the type of glove and therefore has to be measured for each case.

Respiratory protection : Not required; except in case of aerosol formation.

Filter type : Filter type A-P

Protective measures : The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : liquid

Colour : colourless

Odour : characteristic

Odour Threshold : No data available

pH : No data available

Melting point/range : No data available

Boiling point/boiling range : No data available
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<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Flash point</strong></td>
<td>&gt;= 200 °C</td>
</tr>
<tr>
<td><strong>Method:</strong> ISO 2592, open cup</td>
<td></td>
</tr>
<tr>
<td><strong>Evaporation rate</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Flammability (solid, gas)</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Upper explosion limit</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Lower explosion limit</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Vapour pressure</strong></td>
<td>&lt; 0.001 hPa (20 °C)</td>
</tr>
<tr>
<td><strong>Relative vapour density</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Density</strong></td>
<td>0.86 g/cm³ (20 °C)</td>
</tr>
<tr>
<td><strong>Bulk density</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Water solubility</strong></td>
<td>insoluble</td>
</tr>
<tr>
<td><strong>Solubility in other solvents</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Partition coefficient: n-octanol/water</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Auto-ignition temperature</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Decomposition temperature</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Viscosity</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Viscosity, dynamic</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Viscosity, kinematic</strong></td>
<td>220 mm²/s (40 °C)</td>
</tr>
<tr>
<td><strong>Explosive properties</strong></td>
<td>Not explosive</td>
</tr>
<tr>
<td><strong>Oxidizing properties</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Sublimation point</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Self-ignition</strong></td>
<td>No data available</td>
</tr>
</tbody>
</table>

### 9.2 Other information

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sublimation point</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Self-ignition</strong></td>
<td>No data available</td>
</tr>
</tbody>
</table>
SECTION 10: Stability and reactivity

10.1 Reactivity
No hazards to be specially mentioned.

10.2 Chemical stability
Stable under normal conditions.

10.3 Possibility of hazardous reactions
- Hazardous reactions: No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid
Conditions to avoid: No conditions to be specially mentioned.

10.5 Incompatible materials
Materials to avoid: No materials to be especially mentioned.

10.6 Hazardous decomposition products
No decomposition if stored and applied as directed.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product:
- Acute oral toxicity: Remarks: This information is not available.
- Acute inhalation toxicity: Remarks: This information is not available.
- Acute dermal toxicity: Remarks: This information is not available.

Skin corrosion/irritation

Product:
Remarks: This information is not available.

Serious eye damage/eye irritation

Product:
Remarks: This information is not available.

Respiratory or skin sensitisation

Product:
Remarks: This information is not available.
Germ cell mutagenicity

**Product:**
Genotoxicity in vitro : Remarks: No data available

Genotoxicity in vivo : Remarks: No data available

Carcinogenicity

**Product:**
Remarks: No data available

Reproductive toxicity

**Product:**
Effects on fertility : Remarks: No data available

Effects on foetal development : Remarks: No data available

Repeated dose toxicity

**Product:**
Remarks: This information is not available.

Aspiration toxicity

**Product:**
This information is not available.

Further information

**Product:**
Remarks: Information given is based on data on the components and the toxicology of similar products.

SECTION 12: Ecological information

12.1 Toxicity

**Product:**
Toxicity to fish : Remarks: No data available
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Toxicity to daphnia and other aquatic invertebrates: Remarks: No data available
Toxicity to algae: Remarks: No data available
Toxicity to microorganisms: Remarks: No data available

12.2 Persistence and degradability

**Product:**
Biodegradability: Remarks: No data available
Physico-chemical removability: Remarks: No data available

12.3 Bioaccumulative potential

**Product:**
Bioaccumulation: Remarks: This mixture contains no substance considered to be persistent, bioaccumulating and toxic (PBT). This mixture contains no substance considered to be very persistent and very bioaccumulating (vPvB).

12.4 Mobility in soil

**Product:**
Mobility: Remarks: No data available
Distribution among environmental compartments: Remarks: No data available

12.5 Results of PBT and vPvB assessment

**Product:**
Assessment: This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

**Product:**
Additional ecological information: No information on ecology is available.
SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product: The product should not be allowed to enter drains, water courses or the soil.

Waste codes should be assigned by the user based on the application for which the product was used.

Contaminated packaging: The following Waste Codes are only suggestions:

Packaging that is not properly emptied must be disposed of as the unused product. Dispose of waste product or used containers according to local regulations.

SECTION 14: Transport information

14.1 UN number

ADR: Not regulated as a dangerous good
IMDG: Not regulated as a dangerous good
IATA: Not regulated as a dangerous good

14.2 UN proper shipping name

ADR: Not regulated as a dangerous good
IMDG: Not regulated as a dangerous good
IATA: Not regulated as a dangerous good

14.3 Transport hazard class(es)

ADR: Not regulated as a dangerous good
IMDG: Not regulated as a dangerous good
IATA: Not regulated as a dangerous good

14.4 Packing group

ADR: Not regulated as a dangerous good
IMDG: Not regulated as a dangerous good
IATA (Cargo): Not regulated as a dangerous good
IATA (Passenger): Not regulated as a dangerous good

14.5 Environmental hazards

ADR: Not regulated as a dangerous good
IMDG: Not regulated as a dangerous good
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IATA (Passenger) : Not regulated as a dangerous good
IATA (Cargo) : Not regulated as a dangerous good

14.6 Special precautions for user
No special precautions required.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code
Remarks : Not applicable for product as supplied.

SECTION 15: Regulatory information

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

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59) :
This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57).

REACH - List of substances subject to authorisation (Annex XIV) :
Not applicable

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer :
Not applicable

Regulation (EC) No 850/2004 on persistent organic pollutants :
Not applicable

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals :
Not applicable

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII) :
Not applicable


Volatile organic compounds :
Directive 2010/75/EU of 24 November 2010 on industrial emissions (integrated pollution prevention and control)
Volatile organic compounds (VOC) content: < 0.01 %
Remarks: VOC content excluding water

15.2 Chemical safety assessment
This information is not available.
SECTION 16: Other information

Full text of other abbreviations

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxin; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; ICS0 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50% of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

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