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

1.1 Product identifier

Product name : Lub FOOD
Article-No. : 096017

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

Use of the Substance/Mixture : Grease
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
Responsible/issuing person
fds@ntn-snr.fr
Service Laboratoire NTN-SNR Roulements

1.4 Emergency telephone number

Tel. urgence (Heure bureau) : +33 (0)4 50 65 97 55
Emergency Tel.(France) ORFILA (INRS) : +33 (0)1 45 42 59 59

2. Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)
Chronic aquatic toxicity, Category 3
H412: Harmful to aquatic life with long lasting effects

Classification (67/548/EEC, 1999/45/EC)
Dangerous for the environment
R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard statements : H412 Harmful to aquatic life with long lasting effects.

Precautionary statements : Prevention: P273 Avoid release to the environment.

2.3 Other hazards

3. Composition/information on ingredients

3.2 Mixtures

Chemical nature : Mineral oil.
                  aluminium complex soap

Hazardous components

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2-(2-heptadec-8-etyl-2-imidazolin-1-yl)ethanol</td>
<td>95-38-5 202-414-9</td>
<td>Xn; R22-R48/22 C; R34 N; R50/53</td>
<td>Acute Tox. 4; H302 Skin Corr. 1C; H314 Eye Dam. 1; H318 STOT RE 2; H373 Aquatic Acute 1; H400 Aquatic Chronic 1; H410</td>
<td>&gt;= 0.25 - &lt; 1</td>
</tr>
<tr>
<td>(Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine</td>
<td>110-25-8 203-749-3 01-2119488991-20-XXXX</td>
<td>Xn; R20 Xi; R38-R41 N; R50</td>
<td>Acute Tox. 4; H332 Skin Irrit. 2; H315 Eye Dam. 1; H318 Aquatic Acute 1; H400</td>
<td>&gt;= 0.25 - &lt; 1</td>
</tr>
<tr>
<td>2,6-di-tert-butyl-p-cresol</td>
<td>128-37-0 204-881-4 01-2119555270-46-XXXX</td>
<td>N; R50/53</td>
<td>Aquatic Acute 1; H400 Aquatic Chronic 1; H410</td>
<td>&gt;= 0.1 - &lt; 0.25</td>
</tr>
</tbody>
</table>

For the full text of the R-phrases mentioned in this Section, see Section 16.
For the full text of the H-Statements mentioned in this Section, see Section 16.
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 unconscious place in recovery position and seek medical advice.
- Keep respiratory tract clear.
- 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.
- Wash clothing before reuse.
- Thoroughly clean shoes before reuse.

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.
- If unconscious place in recovery position and seek medical advice.
- Keep respiratory tract clear.
- Do not induce vomiting without medical advice.
- Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms:
- No information available.

Risks:
- None known.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment:
- No information available.

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
  - Metal oxides
SAFETY DATA SHEET
according to Regulation (EC) No. 1907/2006 - GB

NTN-SNR LUB FOOD

5.3 Advice for firefighters

Special protective equipment for firefighters:
In the event of fire, wear self-contained breathing apparatus.
Use personal protective equipment.
In the case of respirable dust and/or fumes, use self-contained breathing apparatus.
Exposure to decomposition products may be a hazard to health.

Further information:
Standard procedure for chemical fires.
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions:
Evacuate personnel to safe areas.
Use the indicated respiratory protection if the occupational exposure limit is exceeded and/or in case of product release (dust).
Avoid breathing dust.
Refer to protective measures listed in sections 7 and 8.

6.2 Environmental precautions

Environmental precautions:
Do not allow contact with soil, surface or ground water.
If the product contaminates rivers and lakes or drains inform respective authorities.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up:
Clean up promptly by sweeping or vacuum.
Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For personal protection see section 8.

7. Handling and storage

7.1 Precautions for safe handling

Advice on safe handling:
Avoid contact with skin and eyes.
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.
Do not ingest.
Do not repack.
These safety instructions also apply to empty packaging which may still contain product residues.
Keep container closed when not in use.

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):
- Consult the technical guidelines for the use of this substance/mixture.

8. Exposure controls/personal protection

8.1 Control parameters

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value type</th>
<th>Control parameters</th>
<th>Update</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,6-di-tert-butyl-p-cresol</td>
<td>128-37-0</td>
<td>TWA</td>
<td>10 mg/m³</td>
<td>2005-04-06</td>
<td>GB EH40</td>
</tr>
</tbody>
</table>

Further information:
- 2: Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used

DNEL
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol:
- End Use: Workers
  - Exposure routes: Skin contact
  - Potential health effects: Long-term exposure, Systemic effects
  - Value: 0.6 mg/kg

End Use: Workers
- Exposure routes: Inhalation
- Potential health effects: Long-term exposure, Systemic effects
- Value: 0.46 mg/m³

End Use: Workers
- Exposure routes: Skin contact
- Potential health effects: Short-term exposure, Systemic effects
- Value: 2 mg/kg

End Use: Workers
- Exposure routes: Inhalation
- Potential health effects: Short-term exposure, Systemic effects
- Value: 14 mg/m³

(Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine:
- End Use: Industrial use
  - Exposure routes: Inhalation
  - Potential health effects: Long-term systemic effects
  - Value: 0.2 mg/m³
End Use: Industrial use
Exposure routes: Inhalation
Potential health effects: Acute systemic effects
Value: 18 mg/m³

End Use: Industrial use
Exposure routes: Inhalation
Potential health effects: Long-term local effects
Value: 0.01 mg/m³

End Use: Industrial use
Exposure routes: Inhalation
Potential health effects: Acute local effects
Value: 18 mg/m³

End Use: Industrial use
Exposure routes: Skin contact
Potential health effects: Long-term systemic effects
Value: 10 mg/kg

End Use: Industrial use
Exposure routes: Skin contact
Potential health effects: Acute systemic effects
Value: 100 mg/kg

2,6-di-tert-butyl-p-cresol : End Use: Workers
Exposure routes: Inhalation
Potential health effects: Long-term systemic effects
Value: 3.5 mg/m³

End Use: Workers
Exposure routes: Skin contact
Potential health effects: Long-term systemic effects
Value: 0.5 mg/kg

PNEC
2-(2-heptadec-8-etyl-2-imidazolin-1-yl)ethanol : Fresh water
Value: 0.00003 mg/l

Marine water
Value: 0.000003 mg/l

Fresh water sediment
Value: 0.376 mg/kg

Marine sediment
Value: 0.0376 mg/kg

Soil
Value: 0.075 mg/kg

(Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine : Fresh water
Value: 0.00043 mg/l

Marine water
2,6-di-tert-butyl-p-cresol:

- **Fresh water**
  - Value: 0.199 µg/l

- **Marine water**
  - Value: 0.0199 µg/l

- **Intermittent use/release**
  - Value: 1.99 µg/l

Microbiological Activity in Sewage Treatment Systems
Value: 0.17 mg/l

- **Fresh water sediment**
  - Value: 0.0996 mg/kg

- **Marine sediment**
  - Value: 0.00996 mg/kg

- **Soil**
  - Value: 0.04769 mg/kg

- **Oral**
  - Value: 8.33 mg/kg

### 8.2 Exposure controls

#### Engineering measures
Maintain air concentrations below occupational exposure standards.

#### Personal protective equipment

- **Respiratory protection**: Not required; except in case of aerosol formation.
  - Filter type P

- **Hand protection**: 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.
  - In case of contact through splashing:
    - Nitrile rubber
    - Protective index Class 1

- **Eye protection**: Tightly fitting safety goggles
Hygiene measures: Wash face, hands and any exposed skin thoroughly after handling.

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.

Environmental exposure controls
General advice: Do not allow contact with soil, surface or ground water. If the product contaminates rivers and lakes or drains inform respective authorities.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties
Form: paste
Colour: yellow
Odour: characteristic
Odour Threshold: No data available
pH: No data available
Melting point/range: No data available
Boiling point/boiling range: No data available
Flash point: Not applicable
Evaporation rate: No data available
Flammability (solid, gas): Combustible Solids
Lower explosion limit: No data available
Upper explosion limit: No data available
Vapour pressure: < 0.001 hPa, 20 °C
Relative vapour density: No data available
Density: 0.92 g/cm³, 20 °C
Water solubility: insoluble
Solubility in other solvents: No data available
Partition coefficient: n-octanol/water: No data available
Auto-ignition temperature: No data available
Ignition temperature: No data available
Thermal decomposition: No data available
Viscosity, dynamic: No data available
Viscosity, kinematic: No data available
Explosive properties: Not explosive
Oxidizing properties: No data available

9.2 Other information
Sublimation point: No data available
Bulk density: No data available

10. Stability and reactivity

10.1 Reactivity
None reasonably foreseeable.

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

11. Toxicological information

11.1 Information on toxicological effects

Product
Acute oral toxicity: This information is not available.
Acute inhalation toxicity: This information is not available.
Acute dermal toxicity: This information is not available.
Skin corrosion/irritation: This information is not available.
Serious eye damage/eye irritation: This information is not available.
Respiratory or skin sensitisation: This information is not available.
Germ cell mutagenicity: No data available.
Genotoxicity in vitro: No data available.
Genotoxicity in vivo: No data available.
Carcinogenicity: No data available.
### Reproductive toxicity
No data available

### Teratogenicity
No data available

### Repeated dose toxicity
This information is not available.

### Aspiration toxicity
This information is not available.

### Further information
Information given is based on data on the components and the toxicology of similar products.

### Components:
**2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol**:
- **Acute oral toxicity**: LD50: 1,265 mg/kg, Rat, OECD Test Guideline 401, GLP: yes
- **Acute dermal toxicity**: LD50: > 2,000 mg/kg, Rabbit, The substance or mixture has no acute dermal toxicity
- **Skin corrosion/irritation**: Rabbit, Result: Corrosive, category 1C - where responses occur after exposures between 1 hour and 4 hours and observations up to 14 days., OECD Test Guideline 404, GLP: yes

### (Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine:
- **Acute oral toxicity**: LD50: 9,200 mg/kg, Rat
- **Acute inhalation toxicity**: LC50: 1.37 mg/l, 4 h, Rat, dust/mist
- **Skin corrosion/irritation**: Rabbit, Result: Irritating to skin., Classification: Irritating to skin., OECD Test Guideline 404
- **Serious eye damage/eye irritation**: Rabbit, Result: Risk of serious damage to eyes., Classification: Risk of serious damage to eyes., OECD Test Guideline 405
- **Respiratory or skin sensitisation**: Maximisation Test (GPMT), Guinea pig, Result: Does not cause skin sensitisation., Classification: Does not cause skin sensitisation., OECD Test Guideline 406
- **Germ cell mutagenicity**: Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

### STOT - repeated exposure
**Target Organs**: Digestive organs, thymus gland
**Assessment**: May cause damage to organs through prolonged or repeated exposure.

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<table>
<thead>
<tr>
<th>Version 1.1</th>
<th>Revision Date 28.06.2016</th>
<th>Print Date 29.06.2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reproductive toxicity</td>
<td>No data available</td>
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<tr>
<td>Teratogenicity</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Repeated dose toxicity</td>
<td>This information is not available.</td>
<td></td>
</tr>
<tr>
<td>Aspiration toxicity</td>
<td>This information is not available.</td>
<td></td>
</tr>
</tbody>
</table>

Further information: Information given is based on data on the components and the toxicology of similar products.
2,6-di-tert-butyl-p-cresol:
Acute oral toxicity: LD50: > 5,000 mg/kg, Rat, OECD Test Guideline 401
Acute dermal toxicity: LD50: > 5,000 mg/kg, Rat, OECD Test Guideline 402
Skin corrosion/irritation: Rabbit, Result: No skin irritation, Classification: No skin irritation
Serious eye damage/eye irritation: Rabbit, Result: No eye irritation, Classification: No eye irritation
Respiratory or skin sensitisation: Guinea pig, Result: Does not cause skin sensitisation., Classification: Does not cause skin sensitisation.
Germ cell mutagenicity
Genotoxicity in vitro: Ames test, Result: negative, In vitro tests did not show mutagenic effects
Genotoxicity in vivo: In vivo micronucleus test, Result: negative
Assessment: In vivo tests did not show mutagenic effects
Reproductive toxicity: Rat, NOAEL: 100 mg/kg
Assessment: No toxicity to reproduction
STOT - single exposure: Assessment: The substance or mixture is not classified as specific target organ toxicant, single exposure.
STOT - repeated exposure: Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.
Aspiration toxicity: No aspiration toxicity classification

12. Ecological information

12.1 Toxicity
Product:
Toxicity to fish: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Toxicity to daphnia and other aquatic invertebrates: No data available
Toxicity to algae: No data available
Toxicity to bacteria: No data available
Components:

2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol:

Toxicity to fish: LC50: 0.3 mg/l, 96 h, Danio rerio (zebra fish), static test, OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates: EC50: 0.136 mg/l, 48 h, Daphnia magna (Water flea), Immobilization, OECD Test Guideline 202, GLP: yes

Toxicity to algae: ErC50: 0.03 mg/l, 72 h, Desmodesmus subspicatus (green algae), Growth inhibition, OECD Test Guideline 201

M-Factor: 10
Toxicity to bacteria: EC50: 26 mg/l, 3 h, activated sludge, Respiration inhibition, OECD 209

(Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine:

Toxicity to fish: LC50: 3.2 - 4.6 mg/l, 96 h, Leuciscus idus (Golden orfe), static test, DIN 38412


M-Factor: 1
Toxicity to bacteria: EC50: 1,300 mg/l, 3 h, Bacteria, Respiration inhibition, OECD 209, GLP: yes

2,6-di-tert-butyl-p-cresol:

Toxicity to fish: LC50: > 0.57 mg/l, 96 h, Danio rerio (zebra fish), OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates: EC50: > 0.17 mg/l, 48 h, Daphnia magna (Water flea)

Toxicity to algae: EC50: > 0.42 mg/l, 72 h, Desmodesmus subspicatus (green algae)

M-Factor: 1
Toxicity to daphnia and other aquatic invertebrates: NOEC: > 0.39 mg/l, 21 d, Daphnia magna (Water flea)

12.2 Persistence and degradability

Product:

Biodegradability: No data available

Physico-chemical removability: No data available

Components:
2-(2-heptadec-8-enzyl-2-imidazolin-1-yl)ethanol:
Biodegradability: Primary biodegradation, Result: Not rapidly biodegradable, OECD 301 B

(Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine:
Biodegradability: aerobic, 85 %, Result: rapidly biodegradable, Exposure time: 28 d, activated sludge, OECD 301 B

2,6-di-tert-butyl-p-cresol:
Biodegradability: aerobic, 4.5 %, Result: Not rapidly biodegradable, Exposure time: 28 d, activated sludge, OECD Test Guideline 301C

12.3 Bioaccumulative potential

Product:
Bioaccumulation: 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).

Components:
2-(2-heptadec-8-enzyl-2-imidazolin-1-yl)ethanol:
Bioaccumulation: Bioconcentration factor (BCF): 371.8, Does not accumulate in organisms.

(Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine:
Bioaccumulation: Due to the distribution coefficient n-octanol/water, accumulation in organisms is possible.

2,6-di-tert-butyl-p-cresol:
Bioaccumulation: Bioconcentration factor (BCF): 598.4

12.4 Mobility in soil

Product:
Mobility: No data available
Distribution among environmental compartments: 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.

Components:
(Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine:
Assessment: This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

2,6-di-tert-butyl-p-cresol:
Assessment: Non-classified PBT substance, Non-classified vPvB substance

12.6 Other adverse effects

Product:
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: Empty containers can be landfilled, when in accordance with the local regulations.

14. Transport information

14.1 UN number
ADR Not dangerous goods
IMDG Not dangerous goods
IATA Not dangerous goods

14.2 Proper shipping name
ADR Not dangerous goods
IMDG Not dangerous goods
IATA Not dangerous goods

14.3 Transport hazard class
ADR Not dangerous goods
IMDG Not dangerous goods
IATA Not dangerous goods

14.4 Packing group
ADR Not dangerous goods
IMDG Not dangerous goods
IATA Not dangerous goods

14.5 Environmental hazards
ADR Not dangerous goods
14.6 Special precautions for user
No special precautions required.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Remarks: Not applicable for product as supplied.

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).

Major Accident Hazard Legislation: 96/82/EC Update:
Dangerous for the environment 9b
Quantity 1: 200 t
Quantity 2: 500 t

15.2 Chemical Safety Assessment
This information is not available.

16. Other information

Full text of R-phrases referred to under sections 2 and 3
R20 Harmful by inhalation.
R22 Harmful if swallowed.
R34 Causes burns.
R38 Irritating to skin.
R41 Risk of serious damage to eyes.
R48/22 Harmful: danger of serious damage to health by prolonged exposure if swallowed.
R50 Very toxic to aquatic organisms.
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Full text of H-Statements referred to under sections 2 and 3.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H332 Harmful if inhaled.
H373 May cause damage to organs through prolonged or repeated exposure if swallowed.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

Further information

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