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

1.1. **Product identifier**
   - **Trade name or designation of the mixture**: LUB HEAVY DUTY +
   - **Registration number**: None.
   - **Synonyms**: None.
   - **Product code**: C31009-NTN

1.2. **Relevant identified uses of the substance or mixture and uses advised against**
   - **Identified uses**: Lubricant grease
   - **Uses advised against**: Not available.

1.3. **Details of the supplier of the safety data sheet**
   - **Supplier**: NTN-SNR ROULEMENTS
     - **Address**: 1, rue des Usines
     - **BP 2017**
     - **74000 ANNECY**
     - **FR**
     - **Division**: Service Laboratoire NTN-SNR Roulements
     - **Telephone**: Tel.: +33 (0)4 50 65 30 00
     - **Fax**: +33 (0)4 50 65 32 91
     - **e-mail**: fds@ntn-snr.fr
     - **Emergency number**: Emergency Tel. (Office hours) +33 (0)4 50 65 97 55
     - **Emergency Tel. (France)**: ORFILA (INRS) + 33 (0)1 45 42 59 59

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

**SECTION 2: Hazards identification**

2.1. **Classification of the substance or mixture**
   - The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.
   - **Classification according to Regulation (EC) No 1272/2008 as amended**
     - This mixture is not classified as hazardous according to the criteria for classification of the Regulation (EC) 1272/2008 as amended.

2.2. **Label elements**
   - **Label according to Regulation (EC) No. 1272/2008 as amended**
     - **Hazard pictograms**: None.
     - **Signal word**: None.
     - **Hazard statements**: The mixture does not meet the criteria for classification.
     - **Precautionary statements**
       - **Prevention**: Observe good industrial hygiene practices.
       - **Response**: Wash hands after handling.
       - **Storage**: Store away from incompatible materials.
       - **Disposal**: Not available.
     - **Supplemental label information**: EUH208 - Contains Benzenesulfonic acid, di-C10-14-alkyl derivs., calcium salts. May produce an allergic reaction. EUH210 - Safety data sheet available on request.
SAFETY DATA SHEET

Product : LUB HEAVY DUTY +
Code : C31009-NTN
Version : 2.6
Revision : 14-May-2019

2.3. Other hazards
Not a PBT or vPvB substance or mixture.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>%</th>
<th>CAS-No. / EC No.</th>
<th>REACH Registration No.</th>
<th>Index No.</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts</td>
<td>1 - &lt; 3</td>
<td>85940-28-9</td>
<td>01-2119521201-61</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>288-917-4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Classification: Skin Irrit. 2; H315, Eye Irrit. 2; H319, Aquatic Chronic 2; H411

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>%</th>
<th>CAS-No. / EC No.</th>
<th>REACH Registration No.</th>
<th>Index No.</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzenesulfonic acid, di-C10-14-alkyl derivs., calcium salts</td>
<td>&lt; 1</td>
<td>N/D</td>
<td>01-2119978241-36-XXXX</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>939-603-7</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Classification: Skin Sens. 1; H317

List of abbreviations and symbols that may be used above
CLP: Regulation No. 1272/2008. "-" = Not available or this substance does not meet the criteria for classification according to Regulation (EC) 1272/2008 as amended.
#: This substance has been assigned Union workplace exposure limit(s).
M: M-factor
PBT: persistent, bioaccumulative and toxic substance.
vPvB: very persistent and very bioaccumulative substance.
All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Composition comments
Occupational Exposure Limits for constituents are listed in Section 8.
- Contains: Mineral oil
The full text for all H-statements is displayed in section 16. DMSO Extract < 3% according to IF 346 Method.

SECTION 4: First aid measures

General information
Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

4.1. Description of first aid measures

**Inhalation**
Under normal conditions of intended use, this material is not expected to be an inhalation hazard.

**Skin contact**
Wash off with soap and water. Get medical attention if irritation develops and persists.

**Eye contact**
Rinse with water. Get medical attention if irritation develops and persists.

**Ingestion**
Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.

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

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

Treat symptomatically.

SECTION 5: Firefighting measures

General fire hazards
No unusual fire or explosion hazards noted.

5.1. Extinguishing media

**Suitable extinguishing media**
Foam. Dry chemicals. Carbon dioxide (CO2). Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
**SECTION 6: Accidental release measures**

6.1. Personal precautions, protective equipment and emergency procedures

<table>
<thead>
<tr>
<th>For non-emergency personnel</th>
<th>Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. For personal protection, see section 8 of the SDS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>For emergency responders</td>
<td>Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.</td>
</tr>
</tbody>
</table>

6.2. Environmental precautions

Local authorities should be advised if significant spillages cannot be contained. Avoid discharge into drains, water courses or onto the ground.

6.3. Methods and material for containment and cleaning up

The product is immiscible with water and will spread on the water surface. Stop the flow of material, if this is without risk. For waste disposal, see section 13 of the SDS.

6.4. Reference to other sections

For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.

**SECTION 7: Handling and storage**

7.1. Precautions for safe handling

To avoid thermal decomposition, do not overheat. Avoid prolonged or repeated contact with skin. Wash hands after handling. Handle in accordance with good industrial hygiene and safety practices. Adequate ventilation should be provided so that exposure limits are not exceeded.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from heat and sources of ignition. Store in closed original container in a dry place. Store away from incompatible materials (see Section 10 of the SDS).

7.3. Specific end use(s)

Not available.

**SECTION 8: Exposure controls/personal protection**

8.1. Control parameters

<table>
<thead>
<tr>
<th>Occupational exposure limits</th>
<th>No exposure limits noted for ingredient(s).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biological limit values</td>
<td>No biological exposure limits noted for the ingredient(s).</td>
</tr>
<tr>
<td>Recommended monitoring procedures</td>
<td>Follow standard monitoring procedures.</td>
</tr>
<tr>
<td>Derived no effect levels (DNELs)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Predicted no effect concentrations (PNECs)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Exposure guidelines</td>
<td>Occupational Exposure Limits are not relevant to the current physical form of the product.</td>
</tr>
</tbody>
</table>

8.2. Exposure controls

Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas.
Individual protection measures, such as personal protective equipment

**General information**
Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

**Eye/face protection**
Chemical goggles are recommended.

**Skin protection**

- **Hand protection**
  Use protective gloves made of: Nitrile. Polyvinyl chloride (PVC).

- **Other**
  Normal work clothing (long sleeved shirts and long pants) is recommended.

**Respiratory protection**
In case of insufficient ventilation, wear suitable respiratory equipment.

**Thermal hazards**
Wear appropriate thermal protective clothing, when necessary.

**Hygiene measures**
Wash hands after handling. Handle in accordance with good industrial hygiene and safety practices.

**Environmental exposure controls**
Environmental manager must be informed of all major releases.

### SECTION 9: Physical and chemical properties

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

**Appearance**

- **Physical state**
  Solid.

- **Form**
  Solid. Paste.

- **Colour**
  Blonde.

**Odour**
Oily.

**Odour threshold**
Not available.

**pH**
Not applicable.

**Melting point/freezing point**
Not available.

**Initial boiling point and boiling range**
Not available.

**Flash point**
> 200.0 °C (> 392.0 °F) Open cup

**Evaporation rate**
Not available.

**Flammability (solid, gas)**
Not available.

**Upper/lower flammability or explosive limits**

- **Flammability limit - lower (%)**
  Not available.

- **Flammability limit - upper (%)**
  Not available.

**Vapour pressure**
Not available.

**Vapour density**
Not available.

**Relative density**
0.89

**Relative density temperature**
20 °C (68 °F)

**Solubility(ies)**

- **Solubility (water)**
  Insoluble.

- **Partition coefficient (n-octanol/water)**
  Not available.

**Auto-ignition temperature**
> 250 °C (> 482 °F)

**Decomposition temperature**
Not available.

**Viscosity**
Not applicable.
Viscosity temperature  40 °C (104 °F)
Explosive properties Not available.
Oxidising properties Not oxidising.
9.2. Other information
   Dropping point  190 °C (374 °F)
   pH in aqueous solution Not applicable.

SECTION 10: Stability and reactivity

10.1. Reactivity
The product is stable and non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability
Material is stable under normal conditions.

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

10.4. Conditions to avoid
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Avoid temperatures exceeding the decomposition temperature. Contact with incompatible materials.

10.5. Incompatible materials
Strong oxidising agents.

10.6. Hazardous decomposition products
Sulphur compounds. At thermal decomposition temperatures, carbon monoxide and carbon dioxide. Irritating and/or toxic fumes and gases may be emitted upon the product's decomposition.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity
Elevated temperatures or mechanical action may form vapours, mist, or fumes which may be irritating to the eyes, nose, throat, or lungs. Ingestion of large amounts may produce gastrointestinal disturbances including irritation, nausea, and diarrhoea.

Skin corrosion/irritation
Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.

Serious eye damage/eye irritation
Not classified.

Respiratory sensitisation
Not classified.

Skin sensitisation
Not classified.

Germ cell mutagenicity
Not classified.

Carcinogenicity
Not classified.

Reproductive toxicity
Not classified.

Specific target organ toxicity - single exposure
Not classified.

Specific target organ toxicity - repeated exposure
Not classified.

Aspiration hazard
Not classified.

Mixture versus substance information
No information available.

Other information
Not available.

SECTION 12: Ecological information

12.1. Toxicity
Based on available data, the classification criteria are not met for hazardous to the aquatic environment.

12.2. Persistence and degradability
Not available.
12.3. Bioaccumulative potential
Bioconcentration factor (BCF) Not available.

12.4. Mobility in soil
Mobility in general The product is immiscible with water and will spread on the water surface.

12.5. Results of PBT and vPvB assessment
Not a PBT or vPvB substance or mixture. Not available.

12.6. Other adverse effects
No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Residual waste Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

EU waste code Unused product: 16 03 06
Waste codes should be assigned by the user based on the application for which the product was used.

Disposal methods/information Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not discharge into drains, water courses or onto the ground.

Special precautions Dispose in accordance with all applicable regulations.

SECTION 14: Transport information

ADR
14.1. - 14.6.: Not regulated as dangerous goods.

IATA
14.1. - 14.6.: Not regulated as dangerous goods.

IMDG
14.1. - 14.6.: Not regulated as dangerous goods.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable.

SECTION 15: Regulatory information

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

EU regulations
Authorisations
Restrictions on use

Other regulations
The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLF Regulation) as amended. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended.

National regulations
Follow national regulation on the protection of workers from the risks of exposure to carcinogens and mutagens at work, in accordance with Directive 2004/37/EC.

15.2. Chemical safety assessment
No Chemical Safety Assessment has been carried out.
SECTION 16: Other information

List of abbreviations
Not available.

References
Not available.

Information on evaluation method leading to the classification of mixture
The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.

Full text of any H-statements not written out in full under Sections 2 to 15
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H411 Toxic to aquatic life with long lasting effects.

Revision information
This document has undergone significant changes and should be reviewed in its entirety.

Training information
Follow training instructions when handling this material.

This document complements the technical sheets but does not replace them. The information contained herein is based on our knowledge of the concerned product on the date indicated. It is offered in good faith. Furthermore, the regulatory requirements referred to must not be considered as exhaustive. They do not exempt in any form the user from knowing and applying all regulations related to the possession and use of the product. The user takes as their sole responsibility the implementation of precautions relating to storage and their use of the product. NTN-SNR ROULEMENTS cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.