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

1.1 Product identifier

Product name : NTN-SNR LUB 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
Tel : +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.

Additional Labelling

<table>
<thead>
<tr>
<th>EUH210</th>
<th>Safety data sheet available on request.</th>
</tr>
</thead>
<tbody>
<tr>
<td>EUH208</td>
<td>Contains Molybdenum trioxide, reaction products with bis[O,O-bis(2-ethylhexyl)] hydrogen dithiophosphate. May produce an allergic reaction.</td>
</tr>
</tbody>
</table>

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:
  - ester oil
  - Synthetic hydrocarbon oil

Components

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No.</th>
<th>EC-No.</th>
<th>Index-No.</th>
<th>Classification</th>
<th>Concentration limits</th>
<th>Concentration (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Molybdenum trioxide, reaction products with bis[O,O-bis(2-ethylhexyl)] hydrogen dithiophosphate</td>
<td>947-946-9</td>
<td>01-2120772600-59-XXXX</td>
<td></td>
<td>Skin Irrit.2; H315 Skin Sens.1B; H317 Aquatic Chronic4; H413</td>
<td>&gt;= 0.25 - &lt; 1</td>
<td></td>
</tr>
</tbody>
</table>

For explanation of abbreviations see section 16.

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.
Risks: None known.

4.3 Indication of any immediate medical attention and special treatment needed
Treatment: 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
Nitrogen oxides (NOx)

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, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

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>residual oils (petroleum), hydro treated</td>
<td>Workers</td>
<td>Inhalation</td>
<td>Long-term systemic effects</td>
<td>2.7 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Workers</td>
<td>Inhalation</td>
<td>Acute systemic effects</td>
<td>5.6 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Workers</td>
<td>Skin contact</td>
<td>Long-term systemic effects</td>
<td>1 mg/kg</td>
</tr>
<tr>
<td>bis(4-(1,1,3,3-tetramethylbutyl)phenyl)amine</td>
<td>Workers</td>
<td>Inhalation</td>
<td>Long-term systemic effects</td>
<td>49.3 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Workers</td>
<td>Dermal</td>
<td>Long-term systemic effects</td>
<td>14 mg/kg bw/day</td>
</tr>
<tr>
<td>Molybdenum trioxide, reaction products with bis[O,O-bis(2-ethylhexyl)] hydrogen dithiophosphate</td>
<td>Workers</td>
<td>Inhalation</td>
<td>Long-term systemic effects</td>
<td>4.93 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Workers</td>
<td>Dermal</td>
<td>Long-term systemic effects</td>
<td>1.4 mg/kg bw/day</td>
</tr>
</tbody>
</table>

8.2 Exposure controls

Engineering measures

none

Personal protective equipment

Eye protection : Safety glasses with side-shields

Hand protection

Material : Nitrile rubber
Break through time : > 10 min
Protective index : Class 1

Remarks : For prolonged or repeated contact use protective gloves. 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. The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.

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 workplace.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance: liquid

Colour: green

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: >= 220 °C  
Method: ISO 2592, open cup

Evaporation rate: No data available

Flammability (solid, gas): Not applicable

Upper explosion limit / Upper flammability limit: No data available

Lower explosion limit / Lower flammability limit: No data available

Vapour pressure: < 0.001 hPa (20 °C)

Relative vapour density: No data available

Density: 0.95 g/cm³  
(20 °C)

Bulk density: No data available

Solubility(ies)

Water solubility: insoluble
Solubility in other solvents : No data available
Partition coefficient: n-octanol/water : No data available
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Viscosity
  Viscosity, dynamic : No data available
  Viscosity, kinematic : 320 mm²/s (40 °C)
Explosive properties : Not explosive
Oxidizing properties : No data available

9.2 Other information
  Sublimation point : No data available
  Self-ignition : No data available

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.

**Components:**
Molybdenum trioxide, reaction products with bis[O,O-bis(2-ethylhexyl)] hydrogen dithiophosphate:
- Assessment: Irritating to skin.
- Result: Irritating to skin.

Serious eye damage/eye irritation

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

**Components:**
Molybdenum trioxide, reaction products with bis[O,O-bis(2-ethylhexyl)] hydrogen dithiophosphate:
- Assessment: No eye irritation
- Result: No eye irritation

Respiratory or skin sensitisation

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

**Components:**
Molybdenum trioxide, reaction products with bis[O,O-bis(2-ethylhexyl)] hydrogen dithiophosphate:
- Assessment: The product is a skin sensitiser, sub-category 1B.
- Result: The product is a skin sensitiser, sub-category 1B.
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
Toxicity to daphnia and other aquatic invertebrates : Remarks: No data available
Toxicity to algae/aquatic plants : Remarks: No data available
10. Toxicity to microorganisms

Remarks: No data available

Components:

Molybdenum trioxide, reaction products with bis[O,O-bis(2-ethylhexyl)] hydrogen dithiophosphate:

Toxicity to microorganisms

Remarks: No data available

Toxicity to fish

LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l
Exposure time: 96 h
Test Type: semi-static test
Method: OECD Test Guideline 203
GLP: yes

Toxicity to daphnia and other aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 100 mg/l
Exposure time: 48 h
Test Type: static test
Method: OECD Test Guideline 202
GLP: yes

Toxicity to algae/aquatic plants

EC50 (Pseudokirchneriella subcapitata (green algae)): > 100 mg/l
Exposure time: 72 h
Test Type: static test
Method: OECD Test Guideline 201
GLP: yes

12.2 Persistence and degradability

Product:

Biodegradability

Remarks: No data available

Physico-chemical removability

Remarks: No data available

Components:

Molybdenum trioxide, reaction products with bis[O,O-bis(2-ethylhexyl)] hydrogen dithiophosphate:

Biodegradability

Result: Not rapidly biodegradable
Biodegradation: 11 %
Exposure time: 28 d
Method: OECD Test Guideline 301B

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).
Components:
Molybdenum trioxide, reaction products with bis[O,O-bis(2-ethylhexyl)] hydrogen dithiophosphate:
Partition coefficient: n-octanol/water: log Pow: > 4

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: 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.

The following Waste Codes are only suggestions:
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
IATA (Passenger) : Not regulated as a dangerous good
IATA (Cargo) : Not regulated as a dangerous good

14.6 Special precautions for user
Not applicable

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)
Not applicable

15.2 Chemical safety assessment
This information is not available.

SECTION 16: Other information

Full text of H-Statements
H315 : Causes skin irritation.
H317 : May cause an allergic skin reaction.
H413 : May cause long lasting harmful effects to aquatic life.

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 Toxicant; 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 - In-
Further information

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