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

1.1 Product identifier
- Trade name: STIHL Superlub FS
  Getriebefett für Motorsensen und Freischneider
  Gear lubricant for brushcutters and clearing saws
- Article number: 0781 120 1116, 0781 120 1117, 0781 120 1118, 0781 120 1022

1.2 Relevant identified uses of the substance or mixture and uses advised against
No further relevant information available.

1.3 Details of the supplier of the safety data sheet
- Manufacturer/Supplier:
  ANDREAS STIHL AG & Co.KG
  Badstr. 115
  D-71336 Waiblingen
  Tel: +49(0)7151-26-3237
  Fax: +49(0)7151-26-83237
  Email: info@stihl.com

- Informing department:
  Produktmanagement Forsttechnik
  Tel: +49(0)7151-26-3237
  Fax: +49(0)7151-26-83237

1.4 Emergency telephone number:
- Giftnotruf Berlin +49 30 30686 790
- Information for transport Tel.: +49-621-60-43333 Fax: 49-621-60-92664

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
- Classification according to Regulation (EC) No 1272/2008
  The product is not classified according to the CLP regulation.

2.2 Label elements
- Labelling according to Regulation (EC) No 1272/2008 Void
- Hazard pictograms Void
- Signal word Void
- Hazard statements Void

2.3 Other hazards
- Results of PBT and vPvB assessment
  - PBT: Not applicable.
  - vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Chemical characterisation: Mixtures
- Description: Mixture made of named basic oils with additives and lithium soaps used as thickeners.

(Contd. on page 2)
Dangerous components:

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS</th>
<th>EINECS</th>
<th>Additional Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mineral oil, highly refined</td>
<td>68649-42-3</td>
<td>272-028-3</td>
<td>Eye Dam. 1, H318; Aquatic Chronic 2, H411; Skin Irrit. 2, H315</td>
</tr>
<tr>
<td>Phosphorothioic acid, O,O-di-C1-14-alkyl esters, zinc salts</td>
<td>&lt; 1%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Additional information:

- Highly refined mineral oil (IP 346 DMSO < 3%)
- For the wording of the listed risk phrases refer to section 16.

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
  - **After inhalation** Supply fresh air; consult doctor in case of symptoms.
  - **After skin contact**
    - Instantly wash with water and soap and rinse thoroughly.
    - If skin irritation continues, consult a doctor.
  - **After eye contact**
    - Rinse opened eye for several minutes under running water. If symptoms persist, consult doctor.
  - **After swallowing** Do not induce vomiting; instantly call for medical help.

- **4.2 Most important symptoms and effects, both acute and delayed**
  - No further relevant information available.

- **4.3 Indication of any immediate medical attention and special treatment needed**
  - No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
  - **Suitable extinguishing agents**
    - Extinguishing powder, foam or water jet. Fight larger fires with water jet or alcohol-resistant foam.
  - **For safety reasons unsuitable extinguishing agents**
    - Water with a full water jet.
  - **5.2 Special hazards arising from the substance or mixture**
    - Formation of toxic gases is possible during heating or in case of fire.
    - Can be released in case of fire
    - Carbon monoxide (CO)
    - Nitrogen oxides (NOx)

- **5.3 Advice for firefighters**
  - **Protective equipment:** Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
  - Keep away from ignition sources
  - Avoid contact with the product.
- **6.2 Environmental precautions:**
  - Inform respective authorities in case product reaches water or sewage system.
  - Do not allow to enter drainage system, surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
  - Absorb with liquid-binding material (sand, diatomite, universal binders) and disposal in suitable containers.
Safety data sheet
according to 1907/2006/EC, Article 31

Trade name: STIHL Superlub FS
Getriebefett für Motorsensen und Freischneider
Gear lubricant for brushcutters and clearing saws

6.4 Reference to other sections
See Section 13 for information on disposal.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
No special precautions necessary if used correctly.

Information about protection against explosions and fires:
Protect from heat.
The product forms flammable fumes when heated.

7.2 Conditions for safe storage, including any incompatibilities

Storage
Requirements to be met by storerooms and containers: Store only in the original receptacle.
Information about storage in one common storage facility: Store away from oxidising agents.
Further information about storage conditions:
Store receptacle in a well ventilated area.
Storage between 0 and 55 °C.
Store under dry conditions.
Protect from heat and direct sunlight.

7.3 Specific end use(s)
No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components with limit values that require monitoring at the workplace:
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

DNELs

mineral oil, highly refined

Inhalative DNEL (systematic) 5.4 mg/m³/day (employee)

8.2 Exposure controls

Personal protective equipment

General protective and hygienic measures
The usual precautionary measures should be adhered to general rules for handling chemicals.

Breathing equipment:
Not necessary if room is well-ventilated.
Use suitable respiratory protective device in case of insufficient ventilation.

Protection of hands:
Oil resistant gloves
In case of longer or repeated contact with the skin: use protective cream for the skin surfaces coming into contact with the product.

Material of gloves
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

For the permanent contact gloves made of the following materials are suitable:
Nitrile rubber, NBR

(Contd. on page 4)
**SECTION 9: Physical and chemical properties**

**9.1 Information on basic physical and chemical properties**

**General Information**

- **Appearance:** Pasty
- **Colour:** Brown
- **Odour:** Type specific
- **pH-value at 20 °C:** n.a.
- **Change in condition**
  - **Melting point/Melting range:** Not determined
  - **Boiling point/Boiling range:** > 200 °C
  - **Drip point:** 175 °C (ASTM D 566)
- **Flash point:** > 230 °C (ASTM D 92)
- **Ignition temperature:** > 300 °C (DIN 51794)
- **Self-inflammability:** Product is not selfigniting.
- **Danger of explosion:** Product is not explosive.
- **Vapour pressure at 20 °C:** <0.1 hPa
- **Density at 20 °C:** 0.9 g/cm³
- **Solubility in / Miscibility with**
  - Water: Insoluble
- **Partition coefficient (n-octanol/water):** Not determined.

**9.2 Other information**

No further relevant information available.

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**SECTION 10: Stability and reactivity**

**10.1 Reactivity**

**10.2 Chemical stability**

- **Thermal decomposition / conditions to be avoided:**
  
  No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** Avoid contact with strong oxidizing agents.
- **10.6 Hazardous decomposition products:**
  - Nitrogen oxides (NOx)
  - Sulphur oxides (SOx)
  - Carbon monoxide and carbon dioxide

(Contd. on page 5)
**SECTION 11: Toxicological information**

· **11.1 Information on toxicological effects**
  
  **Acute toxicity:**
  
  · LD/LC50 values that are relevant for classification:

<table>
<thead>
<tr>
<th></th>
<th>LD50</th>
<th>LC50/4 h</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>&gt;5000 mg/kg (rat) ((OECD 401))</td>
<td></td>
</tr>
<tr>
<td>Dermal</td>
<td>&gt;5000 mg/kg (rat) ((OECD 402))</td>
<td></td>
</tr>
<tr>
<td>Inhalative</td>
<td>&gt;50 mg/l (rat)</td>
<td></td>
</tr>
</tbody>
</table>

68649-42-3 Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts

<table>
<thead>
<tr>
<th></th>
<th>LD50</th>
<th>LC50/4 h</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>&gt;2000 mg/kg (rat)</td>
<td></td>
</tr>
<tr>
<td>Dermal</td>
<td>&gt;5000 mg/kg (Kaninchen)</td>
<td></td>
</tr>
<tr>
<td>Inhalative</td>
<td>&gt;50 mg/l (rat)</td>
<td></td>
</tr>
</tbody>
</table>

· **Primary irritant effect:**
  
  · on the skin: No irritant effect.
  
  · on the eye: No irritant effect.
  
  · Sensitisation:

  No sensitizing effect known.

  Sensitising effect by skin contact is possible by prolonged exposure.

**SECTION 12: Ecological information**

· **12.1 Toxicity**
  
  **Aquatic toxicity:**

  No further relevant information available.

<table>
<thead>
<tr>
<th></th>
<th>EC50 (48 h)</th>
<th>LC50/48 h</th>
</tr>
</thead>
<tbody>
<tr>
<td>minerall oil, highly refined</td>
<td>&gt;10000 mg/l (daphnia magna) ((OECD 202))</td>
<td>&gt;100 mg/l (fish)</td>
</tr>
<tr>
<td>68649-42-3 Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts</td>
<td>LC50/48 h</td>
<td>1-10 mg/l (fish)</td>
</tr>
</tbody>
</table>

· **12.2 Persistence and degradability**

  The product is not easily, but potentially biodegradable.

· **Other information:**

  Biodegradability is not probable due to the consistency as well as the low degree of water solubility of the product.

· **12.3 Bioaccumulative potential**

  No further relevant information available.

· **12.4 Mobility in soil**

  No further relevant information available.

· **Additional ecological information:**

  · **General notes:**

    Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.

    Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.

  · **12.5 Results of PBT and vPvB assessment**

    · PBT: Not applicable.
    
    · vPvB: Not applicable.

  · **12.6 Other adverse effects**

    No further relevant information available.
SECTION 13: Disposal considerations

- 13.1 Waste treatment methods
  - Recommendation
  The waste code numbers mentioned are recommendations based on the probable use of the product.
The product is suitable for processing by an approved recycling facility or can be disposed of at any government approved waste disposal facility.

- European waste catalogue

  13 00 00 OIL WASTES AND WASTES OF LIQUID FUELS (except edible oils, and those in chapters 05, 12 and 19)
  13 02 00 waste engine, gear and lubricating oils
  13 02 05* mineral-based non-chlorinated engine, gear and lubricating oils

- Uncleaned packagings:
  - Recommendation: Dispose of packaging according to regulations on the disposal of packagings.

SECTION 14: Transport information

- 14.1 UN-Number
  - ADR, ADN, IMDG, IATA Void
- 14.2 UN proper shipping name
  - ADR, ADN, IMDG, IATA Void
- 14.3 Transport hazard class(es)
  - ADR, ADN, IMDG, IATA Void
- 14.4 Packing group
  - ADR, IMDG, IATA Void
- 14.5 Environmental hazards:
  - Marine pollutant: No
- 14.6 Special precautions for user
  - Not applicable.
- 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
  - Not applicable.
- Transport/Additional information:
  - Not dangerous according to the above specifications.
- UN "Model Regulation": -

SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
  - National regulations
  - Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.
**SECTION 16: Other information**

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**
  - H315 Causes skin irritation.
  - H318 Causes serious eye damage.
  - H411 Toxic to aquatic life with long lasting effects.
  - R38 Irritating to skin.
  - R41 Risk of serious damage to eyes.
  - R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

- **Department issuing data specification sheet:**
The safety data sheets were drawn up in cooperation with the Umweltkanzlei Dr. Rhein Beratungs- und Prüfgesellschaft mbH, Phone: +49 5066 900990.

- **Abbreviations and acronyms:**
  - ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
  - IMDG: International Maritime Code for Dangerous Goods
  - IATA: International Air Transport Association
  - GHS: Globally Harmonised System of Classification and Labelling of Chemicals
  - EINECS: European Inventory of Existing Commercial Chemical Substances
  - ELINCS: European List of Notified Chemical Substances
  - CAS: Chemical Abstracts Service (division of the American Chemical Society)
  - DNEL: Derived No-Effect Level (REACH)
  - LC50: Lethal concentration, 50 percent
  - LD50: Lethal dose, 50 percent
  - Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
  - Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1
  - Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2

- **Data compared to the previous version altered.**