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

1.1. Product identifier

Trade name or designation of the mixture: Husqvarna Grease Multi-Purpose

Registration number: -

Synonyms: None.

Product code: 502 51 27-01 (225g.)

Issue date: 01-March-2018

Version number: 01

Revision date: -

Supersedes date: -

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

Identified uses: Lubricating grease.

Uses advised against: Use in accordance with supplier's recommendations.

1.3. Details of the supplier of the safety data sheet

Company name: Husqvarna AB

Drottninggatan 2

561 82 Huskvarna, Sweden

Telephone: +46 (0)36-14 65 00

Contact person: Accessory Department

E-mail: sds.info@husqvarnagroup.com

1.4. Emergency telephone number: +1-760-476-3961 (Access code 333721)

General in EU: 112 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)

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 does not meet the criteria for classification according to Regulation (EC) 1272/2008 as amended.

Hazard summary: Not classified for health hazards. However, occupational exposure to the mixture or substance(s) may cause adverse health effects.

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: Not assigned.

Response: Not assigned.

Storage: Not assigned.

Disposal: Not assigned.

Supplemental label information: EUH210 - Safety data sheet available on request.

2.3. Other hazards

Not a PBT or vPvB substance or mixture.

SECTION 3: Composition/information on ingredients

3.2. Mixtures
General information

<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>Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate)</td>
<td>&lt; 2.5</td>
<td>4259-15-8</td>
<td>01-2119493635-27</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Classification:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Eye Dam. 1; H318, Aquatic Chronic 2; H411</td>
</tr>
</tbody>
</table>

List of abbreviations and symbols that may be used above

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Composition comments

This product is a lithium grease based on mineral oil with additives. The mineral oils in the product contain <3% DMSO extract (IP 346). The full text for all H-statements is displayed in section 16.

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**
Move to fresh air. Call a physician if symptoms develop or persist.

**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**
Exposure may cause temporary irritation, redness, or discomfort.

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

Treat symptomatically.

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

SECTION 5: Firefighting measures

General fire hazards

No unusual fire or explosion hazards noted.

5.1. Extinguishing media

**Suitable extinguishing media**
Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

**Unsuitable extinguishing media**
Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

During fire, gases hazardous to health may be formed.

5.3. Advice for firefighters

**Self-contained breathing apparatus and full protective clothing must be worn in case of fire.**

**Move containers from fire area if you can do so without risk.**

Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel**
In case of spills, beware of slippery floors and surfaces. Keep unnecessary personnel away.

**For emergency responders**
Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.

6.2. Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

6.3. Methods and material for containment and cleaning up

**Large Spills:** Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

**Small Spills:** Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

**Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.**

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

6.4. Reference to other sections
SECTION 7: Handling and storage

7.1. Precautions for safe handling
Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. Avoid prolonged exposure. Observe good industrial hygiene practices. Be aware of potential for surfaces to become slippery.

7.2. Conditions for safe storage, including any incompatibilities
Store in original tightly closed container. Store away from incompatible materials (see section 10 of the SDS).

7.3. Specific end use(s)
Lubricating grease.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits
No exposure limits noted for ingredient(s).

Biological limit values
No biological exposure limits noted for the ingredient(s).

Recommended monitoring procedures
Follow standard monitoring procedures.

Derived no effect levels (DNELs)

<table>
<thead>
<tr>
<th>General Population</th>
<th>Components</th>
<th>Value</th>
<th>Assessment factor</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) (CAS 4259-15-8)</td>
<td>Long-term, Systemic, Dermal</td>
<td>4.8 mg/kg bw/day</td>
<td>240</td>
<td>Repeated dose toxicity</td>
</tr>
<tr>
<td></td>
<td>Long-term, Systemic, Inhalation</td>
<td>1.67 mg/m3</td>
<td></td>
<td>Repeated dose toxicity</td>
</tr>
<tr>
<td></td>
<td>Long-term, Systemic, Oral</td>
<td>0.19 mg/kg bw/day</td>
<td>600</td>
<td>Repeated dose toxicity</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Workers</th>
<th>Components</th>
<th>Value</th>
<th>Assessment factor</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) (CAS 4259-15-8)</td>
<td>Long-term, Systemic, Dermal</td>
<td>9.6 mg/kg bw/day</td>
<td>120</td>
<td>Repeated dose toxicity</td>
</tr>
<tr>
<td></td>
<td>Long-term, Systemic, Inhalation</td>
<td>6.6 mg/m3</td>
<td>30</td>
<td>Repeated dose toxicity</td>
</tr>
</tbody>
</table>

Predicted no effect concentrations (PNECs)

<table>
<thead>
<tr>
<th>Components</th>
<th>Value</th>
<th>Assessment factor</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) (CAS 4259-15-8)</td>
<td>Freshwater</td>
<td>4 µg/l</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Marine water</td>
<td>4.6 µg/l</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Secondary poisoning</td>
<td>8.33 mg/kg</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sediment (freshwater)</td>
<td>0.322 mg/kg</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sediment (marine water)</td>
<td>0.032 mg/kg</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Soil</td>
<td>0.062 mg/kg</td>
<td></td>
</tr>
<tr>
<td></td>
<td>STP</td>
<td>3.8 mg/l</td>
<td></td>
</tr>
</tbody>
</table>

8.2. Exposure controls

Appropriate engineering controls
Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

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
Wear safety glasses with side shields (or goggles). Eye protection should meet standard EN 166.

Skin protection
- Hand protection
Wear appropriate chemical resistant gloves. Wear suitable gloves tested to EN374. In full contact: Glove material: Nitrile rubber. Layer thickness: 0.4 mm. Breakthrough time: 480 min. In splash contact: Glove material: Nitrile rubber Layer thickness: 0.1 mm Breakthrough time: 480 min.

- Other
Wear suitable protective clothing.

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

Thermal hazards
Wear appropriate thermal protective clothing, when necessary.

Hygiene measures
Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

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: Liquid.
- Form: Smooth. Semi-solid.
- Colour: Yellow-brown.

Odour
- Not available.

Melting point/freezing point
- Not available.

Initial boiling point and boiling range
- Not available.

Flash point
- > 150.0 °C (> 302.0 °F) (Base oils)

Vapour pressure
- Not available.

Vapour density
- Not available.

Relative density
- < 1 (25 °C)

Solubility(ies)
- Not available.

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

Auto-ignition temperature
- Not available.

Decomposition temperature
- Not available.

Viscosity
- Not available.

Explosive properties
- Not explosive.

9.2. Other information

Density
- < 1000.00 kg/m3 (25 °C)

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
- Contact with incompatible materials.

10.5. Incompatible materials
- Strong oxidising agents.

10.6. Hazardous decomposition products
- No hazardous decomposition products are known.

SECTION 11: Toxicological information

General information
- Occupational exposure to the substance or mixture may cause adverse effects.

Information on likely routes of exposure

Inhalation
- Prolonged inhalation may be harmful.

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

Eye contact
- Direct contact with eyes may cause temporary irritation.

Ingestion
- May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of occupational exposure.

Symptoms
- Exposure may cause temporary irritation, redness, or discomfort.

11.1. Information on toxicological effects

Acute toxicity
Components | Species | Test Results
--- | --- | ---
Zinc bis[(O,O-bis(2-ethylhexyl)) bis(dithiophosphate)] (CAS 4259-15-8)

### Acute

**Dermal**
- **LD50**: Rabbit > 5000 mg/kg, 24 Hours

**Oral**
- **LD50**: Rat 3100 mg/kg

### Skin corrosion/irritation
Due to partial or complete lack of data the classification is not possible.

### Serious eye damage/eye irritation
The mixture is not classified based on the results of tests carried out on a very similar mixture.

### Respiratory sensitisation
Due to partial or complete lack of data the classification is not possible.

### Skin sensitisation
Due to partial or complete lack of data the classification is not possible.

### Germ cell mutagenicity
Due to partial or complete lack of data the classification is not possible.

### Carcinogenicity
Due to partial or complete lack of data the classification is not possible.

### Reproductive toxicity
Due to partial or complete lack of data the classification is not possible.

### Specific target organ toxicity - single exposure
Due to partial or complete lack of data the classification is not possible.

### Specific target organ toxicity - repeated exposure
Due to partial or complete lack of data the classification is not possible.

### Aspiration hazard
Due to partial or complete lack of data the classification is not possible.

### Mixture versus substance information
No information available.

### Other information
Prolonged or repeated contact with used grease may cause serious skin diseases, such as dermatitis.

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### SECTION 12: Ecological information

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

Components | Species | Test Results
--- | --- | ---
Zinc bis[(O,O-bis(2-ethylhexyl)) bis(dithiophosphate)] (CAS 4259-15-8)

**Aquatic**
- **Fish**
  - **LL50**: Rainbow trout (*Oncorhynchus mykiss*) 4.4 mg/l, 96 hours
  - **NOEC**: Rainbow trout (*Oncorhynchus mykiss*) 3.2 mg/l, 96 hours

#### 12.2. Persistence and degradability
The product is expected to be biodegradable.

#### 12.3. Bioaccumulative potential
No data available.

#### Partition coefficient
- **n-octanol/water (log Kow)**: Not available.

#### Bioconcentration factor (BCF)
Not available.

#### Mobility in soil
No data available.

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

#### 12.6. Other adverse effects
Oil spills are generally hazardous to the environment.

---

### 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**
The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.

**Disposal methods/information**
Collect and reclaim or dispose in sealed containers at licensed waste disposal site.

**Special precautions**
Dispose in accordance with all applicable regulations.
SECTION 14: Transport information

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

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

ADN
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 established.

SECTION 15: Regulatory information

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

EU regulations
Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended
Not listed.
Not listed.
Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended
Not listed.
Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended
Not listed.
Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended
Not listed.
Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended
Not listed.
Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) (CAS 4259-15-8)
Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA
Not listed.

Authorisations
Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorisation, as amended
Not listed.

Restrictions on use
Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended
Not listed.
Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended.
Not listed.

Other EU regulations
Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended
Not listed.

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

National regulations
Follow national regulation for work with chemical agents.

15.2. Chemical safety assessment
No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

List of abbreviations
EC50: Effective Concentration 50%.
LC50: Lethal Concentration 50%.
PBT: Persistent, bioaccumulative, toxic.
vPvB: very Persistent, very Bioaccumulative.
The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.

H318 Causes serious eye damage.
H411 Toxic to aquatic life with long lasting effects.

Follow training instructions when handling this material.

Husqvarna AB 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.