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

1.1. Product identifier
Product form: Mixture
Trade name: Agrifluid HT-Plus
Product code: 02.40.50
Type of product: Lubricants
Product group: Trade product

1.2. Relevant identified uses of the substance or mixture and uses advised against
1.2.1. Relevant identified uses
Intended for general public
Main use category: Industrial use, Professional use, Consumer use
Use of the substance/mixture: Hydraulic oil

1.2.2. Uses advised against
No additional information available

1.3. Details of the supplier of the safety data sheet
Kroon Oil BV
Dollegoorweg 15
7602 EC Almelo - Netherlands
T 0031 (0)546 81 81 65
vib@kroon_oil.nl

1.4. Emergency telephone number

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
Hazardous to the aquatic environment — Chronic Hazard, Category 3 H412
Full text of H statements: see section 16

Adverse physicochemical, human health and environmental effects
Harmful to aquatic life with long lasting effects.

2.2. Label elements
Labelling according to Regulation (EC) No. 1272/2008 [CLP]
Signal word (CLP): -
Hazard statements (CLP): H412 - Harmful to aquatic life with long lasting effects.
Precautionary statements (CLP): P273 - Avoid release to the environment.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
EUH-statements: EUH208 - Contains triphenyl phosphate(101-02-0), C14-C18 alpha-olefin epoxide, reaction products with boric acid. May produce an allergic reaction.

2.3. Other hazards
No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances
Not applicable

3.2. Mixtures
Comments: Highly refined mineral oils and additives.

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>Classification according to Regulation (EC) No. 1272/2008 [CLP]</th>
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</thead>
<tbody>
<tr>
<td>zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate)</td>
<td>(CAS-No.) 4259-15-8 (EC-No.) 224-235-5 (REACH-no) 01-2119493635-27</td>
<td>0,1 - 2,5</td>
<td>Eye Dam. 1, H318 Aquatic Chronic 2, H411</td>
</tr>
</tbody>
</table>
**Agrifluid HT-Plus**  
Safety Data Sheet  
according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

<table>
<thead>
<tr>
<th>C14-C18 alpha-olefin epoxide, reaction products with boric acid</th>
<th>(EC-No.) 939-580-3</th>
<th>0,1 - 1</th>
<th>Skin Sens. 1B, H317</th>
</tr>
</thead>
</table>
| triphenyl phosphate | (CAS-No.) 101-02-0  
(Reagent-No.) 202-908-4  
(EC Index-No.) 015-105-00-7  
(REACH-no) 01-2119511213-58 | < 1 | Acute Tox. 4 (Oral), H302  
Eye Irrit. 2, H319  
Skin Irrit. 2, H315  
Skin Sens. 1, H317  
Aquatic Acute 1, H400  
Aquatic Chronic 1, H410 |
| Methyl methacrylate substance with a Community workplace exposure limit (GB) | (CAS-No.) 80-62-6  
(Reagent-No.) 201-297-1  
(EC Index-No.) 607-035-00-6  
(REACH-no) 01-2119452498-28 | < 0,1 | Flamm. Liq. 2, H225  
Skin Irrit. 2, H315  
Skin Sens. 1B, H317  
STOT SE 3, H335 |


The highly refined mineral oil contains <3% (w/w) DMSO extract, according to IP346.

Full text of H-statements: see section 16

### SECTION 4: First aid measures

**4.1. Description of first aid measures**

First-aid measures general: If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation: Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact: Wash skin with plenty of water.

First-aid measures after eye contact: Rinse eyes with water as a precaution.

First-aid measures after ingestion: Call a poison center or a doctor if you feel unwell. Do not induce vomiting.

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

Symptoms/effects: No additional information available. Not expected to present a significant hazard under anticipated conditions of normal use.

Symptoms/effects after ingestion: May result in aspiration into the lungs, causing chemical pneumonia.

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

Treat symptomatically.

### SECTION 5: Firefighting measures

**5.1. Extinguishing media**


Unsuitable extinguishing media: Do not use a heavy water stream.

**5.2. Special hazards arising from the substance or mixture**

Fire hazard: Combustible liquid.

Hazardous decomposition products in case of fire: Toxic fumes may be released. Incomplete combustion releases dangerous carbon monoxide, carbon dioxide and other toxic gases.

**5.3. Advice for firefighters**

Protection during firefighting: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

### SECTION 6: Accidental release measures

**6.1. Personal precautions, protective equipment and emergency procedures**

**6.1.1. For non-emergency personnel**

Emergency procedures: Ventilate spillage area.

**6.1.2. For emergency responders**

Protective equipment: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

**6.2. Environmental precautions**

Avoid release to the environment.

**6.3. Methods and material for containment and cleaning up**

Methods for cleaning up: Take up liquid spill into absorbent material.

Other information: Dispose of materials or solid residues at an authorized site.
6.4. Reference to other sections
For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling: Provide good ventilation in process area to prevent formation of vapours.

Hygiene measures: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Keep container closed when not in use. Keep in a cool, well-ventilated place away from heat.

Storage temperature: 0 - 40 °C

7.3. Specific end use(s)
No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Agrifluid HT-Plus

<table>
<thead>
<tr>
<th>EU</th>
<th>Exposure limits/standards for materials that can be formed when handling this product. When mists/aerosols can occur the following is recommended: 5 mg/m³ - ACGIH TLV (inhalable fraction).</th>
</tr>
</thead>
</table>

Methyl methacrylate (80-62-6)

<table>
<thead>
<tr>
<th>EU</th>
<th>Local name</th>
<th>Methyl methacrylate</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU</td>
<td>IOELV TWA (ppm)</td>
<td>50 ppm</td>
</tr>
<tr>
<td>EU</td>
<td>IOELV STEL (ppm)</td>
<td>100 ppm</td>
</tr>
<tr>
<td>EU</td>
<td>Regulatory reference</td>
<td>COMMISSION DIRECTIVE 2009/161/EU</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>Local name</td>
<td>Methyl methacrylate</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>WEL TWA (mg/m³)</td>
<td>208 mg/m³</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>WEL TWA (ppm)</td>
<td>50 ppm</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>WEL STEL (mg/m³)</td>
<td>416 mg/m³</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>WEL STEL (ppm)</td>
<td>100 ppm</td>
</tr>
</tbody>
</table>

8.2. Exposure controls

Appropriate engineering controls:
Ensure good ventilation of the work station.

Materials for protective clothing:
Wear suitable protective clothing

Hand protection:
Protective gloves

Eye protection:
Safety glasses

Skin and body protection:
Wear suitable protective clothing

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

Environmental exposure controls:
Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Liquid

Colour: brown.
Agrifluid HT-Plus
Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Odour: characteristic.
Odour threshold: No data available
pH: No data available
Relative evaporation rate (butylacetate=1): No data available
Melting point: Not applicable
Freezing point: -45 °C - ASTM D5950 (pour point)
Boiling point: No data available
Flash point: 215 °C - ASTM D92 (COC)
Auto-ignition temperature: No data available
Decomposition temperature: No data available
Flammability (solid, gas): Not applicable
Vapour pressure: No data available
Relative vapour density at 20 °C: No data available
Relative density: No data available
Density: 0.867 kg/l (15 °C) - ASTM D4052
Solubility: Water: Practically not miscible.
Log Pow: No data available
Viscosity, kinematic: 60 mm²/s (40 °C) - ASTM D7279
Viscosity, dynamic: No data available
Explosive properties: Presents no particular fire or explosion hazard.
Oxidising properties: No data available
Explosive limits: No data available

9.2. Other information
VOC content: 0 %

SECTION 10: Stability and reactivity
10.1. Reactivity
The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability
Stable under normal conditions.

10.3. Possibility of hazardous reactions
No dangerous reactions known under normal conditions of use. Reacts violently with (strong) oxidizers.

10.4. Conditions to avoid
None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials
No additional information available

10.6. Hazardous decomposition products
No decomposition if stored normally.

SECTION 11: Toxicological information
11.1. Information on toxicological effects
Acute toxicity (oral): Not classified
Acute toxicity (dermal): Not classified
Acute toxicity (inhalation): Not classified

<table>
<thead>
<tr>
<th>Compound</th>
<th>LD50 oral rat (mg/kg)</th>
<th>LD50 dermal rabbit (mg/kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) (4259-15-8)</td>
<td>3100 (OECD 401 method)</td>
<td>&gt; 5000 (OECD 402 method)</td>
</tr>
<tr>
<td>triphenyl phosphite (101-02-0)</td>
<td>1600</td>
<td></td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>Not classified</td>
<td></td>
</tr>
<tr>
<td>Serious eye damage/irritation</td>
<td>Not classified</td>
<td></td>
</tr>
<tr>
<td>Respiratory or skin sensitisation</td>
<td>Not classified</td>
<td></td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>Not classified</td>
<td></td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Not classified</td>
<td></td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>Not classified</td>
<td></td>
</tr>
<tr>
<td>STOT-single exposure</td>
<td>Not classified</td>
<td></td>
</tr>
</tbody>
</table>
STOT-repeated exposure: Not classified
Aspiration hazard: Not classified

Agrifluid HT-Plus
Viscosity, kinematic: 60 mm²/s (40 °C) - ASTM D7279

SECTION 12: Ecological information

12.1. Toxicity
Ecology - general: Harmful to aquatic life with long lasting effects.
Acute aquatic toxicity: Not classified
Chronic aquatic toxicity: Harmful to aquatic life with long lasting effects.

zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) (4259-15-8)
LC50 fish 1: 4,4 mg/l (Oncorhynchus mykiss, 96h) [OECD 203]
EC50 Daphnia 1: 75 mg/l (Daphnia magna, 48h) [OECD 202]
ErC50 (algae): > 240 mg/l (Desmodesmus subspicatus, 72h)

triphenyl phosphite (101-02-0)
EC50 Daphnia 1: 0,94 mg/l

C14-C18 alpha-olefin epoxide, reaction products with boric acid
LC50 fish 1: > 100 mg/l
EC50 Daphnia 1: > 100 mg/l
EC50 72h algae (1): > 100 mg/l
NOEC chronic crustacea: 100 mg/l

12.2. Persistence and degradability
zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) (4259-15-8)
Biodegradation: 5 % (closed bottle 28d.)

triphenyl phosphite (101-02-0)
Biodegradation: 0,1 % (closed bottle 28d.)

12.3. Bioaccumulative potential
zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) (4259-15-8)
Log Pow: 3,59
Log Kow: 3,6 (octanol/water 0.1d.)

triphenyl phosphite (101-02-0)
Log Kow: 6,62 (octanol/water 0.1d.)

C14-C18 alpha-olefin epoxide, reaction products with boric acid
Log Kow: 9,4

12.4. Mobility in soil
No additional information available

12.5. Results of PBT and vPvB assessment
No additional information available

12.6. Other adverse effects
No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Waste treatment methods: Do not allow into drains or water courses. Dispose of contents/container in accordance with licensed collector’s sorting instructions.

Product/Packaging disposal recommendations: Dispose in a safe manner in accordance with local/national regulations.
European List of Waste (LoW) code: 13 02 05* - mineral-based non-chlorinated engine, gear and lubricating oils
**SECTION 14: Transport information**

In accordance with ADR / RID / IMDG / IATA / ADN

<table>
<thead>
<tr>
<th>ADR</th>
<th>IMDG</th>
<th>IATA</th>
<th>ADN</th>
<th>RID</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

**14.1. UN number**
Not applicable

**14.2. UN proper shipping name**
Not applicable

**14.3. Transport hazard class(es)**
Not applicable

**14.4. Packing group**
Not applicable

**14.5. Environmental hazards**
Not applicable

No supplementary information available

**14.6. Special precautions for user**

**Overland transport**
Not applicable

**Transport by sea**
Not applicable

**Air transport**
Not applicable

**Inland waterway transport**
Not applicable

**Rail transport**
Not applicable

**14.7. Transport in bulk according to Annex II of Marpol and the IBC Code**
Not applicable

**SECTION 15: Regulatory information**

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

**15.1.1. EU-Regulations**

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:

3(c) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1

- Agrifluid HT-Plus - zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) - triphenyl phosphate

40. Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not.

- Methyl methacrylate

3(b) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10

- Methyl methacrylate - zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) - triphenyl phosphate - C14-C18 alpha-olefin epoxide, reaction products with boric acid

3. Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008

- Methyl methacrylate - zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) - triphenyl phosphate - C14-C18 alpha-olefin epoxide, reaction products with boric acid

3(a) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F

- Methyl methacrylate
Agrifluid HT-Plus
Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830
Contains no substance on the REACH candidate list
Contains no REACH Annex XIV substances

VOC content: 0%

Directive 2012/18/EU (SEVESO III)

15.1.2. National regulations
No additional information available

15.2. Chemical safety assessment
No chemical safety assessment has been carried out

SECTION 16: Other information

<table>
<thead>
<tr>
<th>Section</th>
<th>Changed item</th>
<th>Change</th>
<th>Comments</th>
</tr>
</thead>
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<td>1.1</td>
<td>Name</td>
<td>Removed</td>
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<tr>
<td>3</td>
<td>Composition/information on ingredients</td>
<td>Modified</td>
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<tr>
<td>15.1</td>
<td>REACH Annex XVII</td>
<td>Added</td>
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</tbody>
</table>

Abbreviations and acronyms:

- 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
- ATE: Acute Toxicity Estimate
- BCF: Bioconcentration factor
- CLP: Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
- DMEL: Derived Minimal Effect level
- DNEL: Derived-No Effect Level
- EC50: Median effective concentration
- IARC: International Agency for Research on Cancer
- IATA: International Air Transport Association
- IMDG: International Maritime Dangerous Goods
- LC50: Median lethal concentration
- LD50: Median lethal dose
- LOAEL: Lowest Observed Adverse Effect Level
- NOAEC: No-Observed Adverse Effect Concentration
- NOAEL: No-Observed Adverse Effect Level
- NOEC: No-Observed Effect Concentration
- OECD: Organisation for Economic Co-operation and Development
- PBT: Persistent Bioaccumulative Toxic
- PNEC: Predicted No-Effect Concentration
- RID: Regulations concerning the International Carriage of Dangerous Goods by Rail
- vPvB: Very Persistent and Very Bioaccumulative

Full text of H- and EUH-statements:

- Acute Tox. 4 (Oral): Acute toxicity (oral), Category 4
- Aquatic Acute 1: Hazardous to the aquatic environment — Acute Hazard, Category 1
### Aquatic Chronic 1
- Hazardous to the aquatic environment — Chronic Hazard, Category 1

### Aquatic Chronic 2
- Hazardous to the aquatic environment — Chronic Hazard, Category 2

### Eye Dam. 1
- Serious eye damage/eye irritation, Category 1

### Eye Irrit. 2
- Serious eye damage/eye irritation, Category 2

### Flam. Liq. 2
- Flammable liquids, Category 2

### Skin Irrit. 2
- Skin corrosion/irritation, Category 2

### Skin Sens. 1
- Skin sensitisation, Category 1

### Skin Sens. 1B
- Skin sensitisation, category 1B

### STOT SE 3
- Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation

**H225**
- Highly flammable liquid and vapour.

**H302**
- Harmful if swallowed.

**H315**
- Causes skin irritation.

**H317**
- May cause an allergic skin reaction.

**H318**
- Causes serious eye damage.

**H319**
- Causes serious eye irritation.

**H335**
- May cause respiratory irritation.

**H400**
- Very toxic to aquatic life.

**H410**
- Very toxic to aquatic life with long lasting effects.

**H411**
- Toxic to aquatic life with long lasting effects.

**H412**
- Harmful to aquatic life with long lasting effects.

**EUH208**
- Contains triphenyl phosphite(101-02-0), C14-C18 alpha-olefin epoxide, reaction products with boric acid. May produce an allergic reaction.

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**SDS EU (REACH Annex II)**

**This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.**