

# Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 20.01.2014

Version number 11

Revision: 18.10.2013

## 1 Identification of the substance/mixture and of the company/undertaking

- **1.1 Product identifier**
- Trade name: **FILDEX LS GEAR 90**
  
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
- **Sector of Use**
  - SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
  - SU21 Consumer uses: Private households / general public / consumers
  - SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites
- **Product category** PC24 Lubricants, greases, release products
- **Process category**
  - PROC1 Use in closed process, no likelihood of exposure
  - PROC2 Use in closed, continuous process with occasional controlled exposure
  - PROC8a Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities
  - PROC8b Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities
  - PROC20 Heat and pressure transfer fluids in dispersive, professional use but closed systems
  - PROC9 Transfer of substance or preparation into small containers (dedicated filling line, including weighing)
- **Environmental release category**
  - ERC9a Wide dispersive indoor use of substances in closed systems
  - ERC9b Wide dispersive outdoor use of substances in closed systems
  - ERC4 Industrial use of processing aids in processes and products, not becoming part of articles
  - ERC7 Industrial use of substances in closed systems
- **Application of the substance / the mixture** Gear lubricant
  
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
  - Fildex Filters Canada
  - 907-1030 West Georgia Street
  - Vancouver, BC, V6E 2Y3, CANADA
  - P: +1-604-691-1775, F: +1-888-873-7090
  - E: sales@Fildex.com

## 2 Hazards identification

- **2.1 Classification of the substance or mixture**
- Classification according to Regulation (EC) No 1272/2008



GHS09 environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**

R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

- **Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

- **Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

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## 2.2 Label elements

### Labelling according to EU guidelines:

Observe the general safety regulations when handling chemicals.

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

### Risk phrases:

52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

### Safety phrases:

29/56 Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.

60 This material and its container must be disposed of as hazardous waste.

### Special labelling of certain preparations:

Contains Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14 alkyl (branched), alkenylamin. May produce an allergic reaction.

## 2.3 Other hazards

### Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

## 3 Composition/information on ingredients

### 3.2 Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

#### Dangerous components:

EC number: 931-384-6 Reg.nr.: 01-2119493620-38	Reaction products of bis(4-methylpentan-2-yl) dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14 alkyl (branched) ☒ Xn R22; ☒ Xi R41; ☒ Xi R43; ☒ N R51/53 ☠ Eye Dam. 1, H318; ☠ Aquatic Chronic 2, H411; ☠ Acute Tox. 4, H302; Skin Sens. 1, H317	1-2.5%
	Mixture Lubrication oils ☠ Asp. Tox. 1, H304	1-2.5%
CAS: 112-90-3 EINECS: 204-015-5	alkenylamin ☒ C R34; ☒ Xn R22-48/22; ☒ Xi R37; ☒ Xi R43; ☒ N R50/53 ☠ STOT RE 2, H373; Asp. Tox. 1, H304; ☠ Skin Corr. 1B, H314; Eye Dam. 1, H318; ☠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; ☠ Acute Tox. 4, H302; STOT SE 3, H335	0.1-1.0%

#### Additional information:

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

For the wording of the listed risk phrases refer to section 16.

## 4 First aid measures

### 4.1 Description of first aid measures

After inhalation: Supply fresh air; consult doctor in case of complaints.

After skin contact: Generally the product does not irritate the skin.

After eye contact: Rinse opened eye for several minutes under running water.

After swallowing: Do not induce vomiting; call for medical help immediately.

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

No further relevant information available.

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- **4.3 Indication of any immediate medical attention and special treatment needed**  
If swallowed or in case of vomiting, danger of entering the lungs.

## 5 Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**  
CO<sub>2</sub>, dry chemical, or foam. Water can be used to cool and protect exposed material.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **5.2 Special hazards arising from the substance or mixture**  
Formation of toxic gases is possible during heating or in case of fire.
- **5.3 Advice for firefighters**
- **Protective equipment:**  
Wear self-contained respiratory protective device.  
Wear fully protective suit.

## 6 Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Wear protective clothing.
- **6.2 Environmental precautions:**  
Do not allow product to reach sewage system or any water course.  
Inform respective authorities in case of seepage into water course or sewage system.  
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Remove from the water surface (e.g. skim or suck off).
- **6.4 Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

## 7 Handling and storage

- **7.1 Precautions for safe handling** Avoid the formation of oil haze.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**  
Store in cool, dry conditions in well sealed receptacles.
- **7.3 Specific end use(s)** No further relevant information available.

## 8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**  
Contains mineral oil. Under conditions which may generate mists, observe the OSHA PEL of 5 mg per cubic meter, ACGIH STEL of 10 mg per cubic meter.
- **Additional information:** The lists valid during the making were used as basis.

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- **8.2 Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:** Wash hands before breaks and at the end of work.
- **Respiratory protection:** Not required.
- **Protection of hands:**



Wear gloves for the protection against chemicals according to EN 374.

- Oil resistant gloves
- **Material of gloves**
  - Nitrile rubber, NBR
  - PVC gloves
  - Neoprene 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**

For continuous contact we recommend gloves with breakthrough time of more than 240 minutes with preference for > 480 minutes where suitable gloves can be identified. For short-term/splash protection we recommend the same, but recognise that suitable gloves offering this level of protection may not be available and in this case a lower breakthrough time may be acceptable so long as appropriate maintenance and replacement regimes are followed.

Glove thickness is not a good predictor of glove resistance to a chemical as it is dependent on the exact composition of the glove material.

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Goggles recommended during refilling
- **Body protection:** Protective workclothing

## 9 Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**

Form:	Fluid
Colour:	Brown
Odour:	Characteristic
- **Change in condition**

Boiling point/Boiling range:	Undetermined.
Drip point:	
Pour point	-30 °C (ASTM D97)
- **Flash point:** > 110 °C
- **Flammability (solid, gaseous):** Not applicable.
- **Self-igniting:** Product is not selfigniting.
- **Danger of explosion:** Product does not present an explosion hazard.
- **Explosion limits:**

Lower:	0.6 Vol %
Upper:	7.0 Vol %
- **Density at 20 °C:** 0.898 g/cm<sup>3</sup>
- **Solubility in / Miscibility with water:** Not miscible or difficult to mix.

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- |   |  |
|---|--|
| · <b>Partition coefficient (n-octanol/water):</b> Not determined. |  |
| · <b>Viscosity:</b><br>40 °C                                      | 150 mm <sup>2</sup> /s (ASTM D445)         |
| · <b>Solvent content:</b><br>Organic solvents:                    | 0.0 %                                      |
| · <b>9.2 Other information</b>                                    | No further relevant information available. |

## 10 Stability and reactivity

- **10.1 Reactivity**
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**  
To avoid thermal decomposition do not overheat.
- **10.3 Possibility of hazardous reactions** Reacts with strong oxidizing agents.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

## 11 Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Sensitisation** No data available to indicate product or components may be a skin sensitizer.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**  
This product contains mineral oils which are considered to be severely refined and not considered to be carcinogenic under IARC. All of the oils in this product have been demonstrated to contain less than 3% extractables by the IP 346 test.

## 12 Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **Other information:** The product is difficultly biodegradable.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Harmful to fish
- **Additional ecological information:**
- **General notes:**  
Harmful to aquatic organisms  
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 course or sewage system.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** No applicable.

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- **12.6 Other adverse effects** No further relevant information available.

### 13 Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**  
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- **European waste catalogue**

13 02 05*	mineral-based non-chlorinated engine, gear and lubricating oils
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- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

### 14 Transport information

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

### 15 Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **National regulations:**
- **Waterhazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**  
H302 Harmful if swallowed.  
H304 May be fatal if swallowed and enters airways.  
H314 Causes severe skin burns and eye damage.  
H317 May cause an allergic skin reaction.

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- H318 Causes serious eye damage.
- H335 May cause respiratory irritation.
- H373 May cause damage to organs through prolonged or repeated exposure.
- 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.
- R22 Harmful if swallowed.
- R34 Causes burns.
- R37 Irritating to respiratory system.
- R41 Risk of serious damage to eyes.
- R43 May cause sensitisation by skin contact.
- R48/22 Harmful: danger of serious damage to health by prolonged exposure if swallowed.
- R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

• **Department issuing MSDS:** Product safety department.

• **Contact:** Product safety department

• **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organization

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 Harmonized 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)

• **Sources**

67/548/EEC

99/45/EEC

EC/453-2010