



## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### ADDINOL Fluid TO-4 SAE 50

Print date: 14.05.2014

Product code: 743101

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

##### 1.1. Product identifier

ADDINOL Fluid TO-4 SAE 50

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

###### Use of the substance/mixture

Gearbox oil. Hydraulic fluid.

##### 1.3. Details of the supplier of the safety data sheet

|                         |                                |                               |
|-------------------------|--------------------------------|-------------------------------|
| Company name:           | ADDINOL Lube Oil GmbH          |                               |
|                         | Gebäude 4609                   |                               |
| Street:                 | Am Haupttor                    |                               |
| Place:                  | D-06237 Leuna                  |                               |
| Telephone:              | +49 (0) 3461 845-201           | Telefax: +49 (0) 3461 845-561 |
| e-mail:                 | info@addinol.de                |                               |
| Contact person:         | Application Technology         |                               |
| Internet:               | www.addinol.de                 |                               |
| Responsible Department: | ADDINOL Application Technology |                               |

##### 1.4. Emergency telephone number:

+49 (0) 3461 845-201 - This number is serviced during office hours.

#### SECTION 2: Hazards identification

##### 2.1. Classification of the substance or mixture

R phrases:  
Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

###### GHS classification

Hazard categories:  
Hazardous to the aquatic environment: Aquatic Chronic 3  
Hazard Statements:  
Harmful to aquatic life with long lasting effects.

##### 2.2. Label elements

###### Hazard statements

H412 Harmful to aquatic life with long lasting effects.

###### Precautionary statements

P273 Avoid release to the environment.  
P501

###### Additional advice on labelling

This preparation is hazardous in the sense of regulation (EC) No 1272/2008 [GHS].

##### 2.3. Other hazards

Prolonged/repetitive skin contact may cause skin defatting or dermatitis.  
Spilled product must not leak into the ground.  
Do not allow uncontrolled leakage of product into the environment.

#### SECTION 3: Composition/information on ingredients

##### 3.2. Mixtures

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**Hazardous components**

| EC No            | Chemical name   | Quantity |
|------------------|---|----------|
| CAS No           | Classification  |          |
| Index No         | GHS classification  |          |
| REACH No         |   |          |
| 291-829-9        | HOB Calcium branched chain alkyl phenate sulphide   | < 1,50 % |
| 90480-91-4       | R53   |          |
|                  | Aquatic Chronic 4; H413   |          |
| 01-2119524004-56 |   |          |
| 272-028-3        | Zinc alkyldithiophosphate   | < 1,20 % |
| 68649-42-3       | Xi - Irritant, N - Dangerous for the environment R36-51-53  |          |
|                  | Eye Irrit. 2, Aquatic Chronic 2; H319 H411  |          |
|                  | Aryl diester  | 1,00 %   |
| confident        | N - Dangerous for the environment R51-53  |          |
|                  | Aquatic Chronic 2; H411   |          |
|                  | branched alkylphenol and calcium branched alkylphenol   | < 0,20 % |
| Polymer          | Repr. Cat. 2, Xi - Irritant, N - Dangerous for the environment R60-36/38-50-53                      |          |
|                  | Skin Irrit. 2, Eye Irrit. 2, Repr. 1B, Aquatic Acute 1, Aquatic Chronic 1; H315 H319 H360 H400 H410 |          |

Full text of R and H phrases: see Section 16.

**Further Information**

DMSO-Extrakt &lt; 3 %, IP 346.

Concentration of PCBs &lt; 1mg/kg.

Classification system: The classification corresponds to the current EC lists and is completed by information from specialist literature and company information.

**SECTION 4: First aid measures****4.1. Description of first aid measures****General information**

Self-protection of the first aider.. Change contaminated clothing. Do not put any product-impregnated cleaning rags into your trouser pockets.

**After inhalation**

Move victim to fresh air. Put victim at rest and keep warm. Seek medical attention if problems persist.

**After contact with skin**

After contact with skin, wash immediately with plenty of water and soap. Change contaminated clothing. In case of skin irritation, seek medical treatment.

**After contact with eyes**

In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist.

**After ingestion**

Do not induce vomiting.

Rinse mouth thoroughly with water. Immediately get medical attention.

**SECTION 5: Firefighting measures**



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#### **5.1. Extinguishing media**

##### **Suitable extinguishing media**

Foam. Extinguishing powder. Carbon dioxide (CO<sub>2</sub>). Atomized water.

##### **Unsuitable extinguishing media**

High power water jet.

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

Can be released in case of fire: Carbon monoxide. Carbon dioxide (CO<sub>2</sub>). Sulfur oxides. Phosphorus oxides. Nitrogen oxides (NO<sub>x</sub>). Carbon black.

#### **5.3. Advice for firefighters**

In case of fire: Wear self-contained breathing apparatus.

#### **Additional information**

Extinguishing materials should be selected according to the surrounding area. Use water spray/stream to protect personnel and to cool endangered containers. In case of fire and/or explosion do not breathe fumes. Contaminated fire-fighting water must be collected separately.

### **SECTION 6: Accidental release measures**

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

High slip hazard because of leaking or spilled product. Remove all sources of ignition. Wear respiratory protection when in the presence of vapour, dust, and aerosols.

#### **6.2. Environmental precautions**

Do not empty into drains or the aquatic environment. In case of gas being released or leakage into waters, ground or the drainage system, the appropriate authorities must be informed. Prevent spreading over great surfaces (e.g. by damming or installing oil booms).

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

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the assimilated material according to the section on waste disposal. Clean contaminated objects and areas thoroughly observing environmental regulations.

### **SECTION 7: Handling and storage**

#### **7.1. Precautions for safe handling**

##### **Advice on safe handling**

Avoid oil mist Avoid contact with skin, eye and clothing.

##### **Advice on protection against fire and explosion**

Keep away from sources of ignition - No smoking.

#### **7.2. Conditions for safe storage, including any incompatibilities**

##### **Requirements for storage rooms and vessels**

Keep the packing dry and well sealed to prevent contamination and absorption of dampness.

##### **Advice on storage compatibility**

Keep away from food, drink and animal feedingstuffs.

Keep away from: Oxidizing agents.

##### **Further information on storage conditions**

Recommended storage temperature: 10 - 30°C

Protect against: heat. UV-radiation/sunlight. frost.

### **SECTION 8: Exposure controls/personal protection**

#### **8.1. Control parameters**

##### **Additional advice on limit values**

Recommended limit value for oil mist

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TWA: 5 mg/m<sup>3</sup>

STEL: 10 mg/m<sup>3</sup>

The product does not contain any relevant quantities of substances with legally established exposure limitation.

### 8.2. Exposure controls



#### Appropriate engineering controls

Provide for sufficient ventilation and punctiform suction at critical points.

#### Protective and hygiene measures

Wash hands before breaks and at the end of work. Take off immediately all contaminated clothing.

Wash contaminated clothing prior to re-use. Do not eat, drink, smoke or sneeze at the workplace.

#### Eye/face protection

Tightly sealed safety glasses. German Industry Norms (DIN) / European Norms (EN): DIN EN 166

#### Hand protection

Tested protective gloves are to be worn: German Industry Norms (DIN) / European Norms (EN): DIN EN 374

Duration of wearing with permanent contact: 480 min

Suitable material: NBR (Nitrile rubber).

Thickness of glove material: 0.7 mm.

Duration of wearing with occasional contact (splashes): 30 min

Suitable material: NBR (Nitrile rubber).

Thickness of glove material: 0.4 mm

Protect skin by using skin protective cream.

#### Skin protection

Wear suitable protective clothing. Change contaminated clothing. Do not put any product-impregnated cleaning rags into your trouser pockets.

#### Respiratory protection

If technical suction or ventilation measures are not possible or are insufficient, protective breathing apparatus must be worn.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

|                 |                    |
|-----------------|--------------------|
| Physical state: | liquid             |
| Colour:         | brown              |
| Odour:          | like: mineral oil. |

#### Test method

#### Changes in the physical state

|  |                                   |
|--|-----------------------------------|
| Initial boiling point and boiling range: | not determined                    |
| Flash point:                             | 250 °C DIN EN ISO 2592            |
| Ignition temperature:                    | > 250 °C DIN 51794                |
| Density (at 15 °C):                      | 0,897 g/cm <sup>3</sup> DIN 51757 |
| Water solubility:                        | virtually insoluble               |



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Viscosity / dynamic:  
(at -15 °C)

80.000 mPa·s DIN 51398

Viscosity / kinematic:  
(at 100 °C)

18,6 mm<sup>2</sup>/s ASTM D 7042

## SECTION 10: Stability and reactivity

### 10.4. Conditions to avoid

Refer to chapter 7 No further action is necessary.  
Do not overheat to avoid decomposition by heat.

### 10.5. Incompatible materials

Reacts with : Oxidizing agents, strong. Acid.

### 10.6. Hazardous decomposition products

Can be released in case of fire: Carbon monoxide. Carbon dioxide (CO<sub>2</sub>). Sulfur oxides. Phosphorus oxides. Nitrogen oxides (NO<sub>x</sub>). Carbon black.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Acute toxicity

No data available

Preparation not tested.

#### Irritation and corrosivity

Irritant effect on the eye: mild irritant.

Irritant effect on the skin: Prolonged/repetitive skin contact may cause skin defatting or dermatitis.

#### Sensitising effects

Evaluation: no danger of sensitization.

#### Severe effects after repeated or prolonged exposure

Prolonged/repetitive skin contact may cause skin defatting or dermatitis.

#### Carcinogenic/mutagenic/toxic effects for reproduction

No data available

#### Specific effects in experiment on an animal

No data available

## SECTION 12: Ecological information

### 12.1. Toxicity

No data available

Preparation not tested.

### 12.2. Persistence and degradability

Not easily bio-degradable (according to OECD-criteria). Do not empty into drains or the aquatic environment.

### 12.3. Bioaccumulative potential

No data available

### 12.4. Mobility in soil

Due to its low solubility in water the product is almost completely mechanically separated in biological waste water treatment plants.

### 12.5. Results of PBT and vPvB assessment

The components in this formulation do not meet the criteria for classification as PBT or vPvB.



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#### 12.6. Other adverse effects

No data available

#### **Further information**

Do not allow uncontrolled leakage of product into the environment.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

##### **Advice on disposal**

Must not be disposed of with domestic refuse. Do not empty into drains or the aquatic environment.

##### **Waste disposal number of waste from residues/unused products**

130205 OIL WASTES AND WASTES OF LIQUID FUELS (except edible oils, and those in chapters 05, 12 and 19); waste engine, gear and lubricating oils; mineral-based non-chlorinated engine, gear and lubricating oils  
Classified as hazardous waste.

##### **Contaminated packaging**

Contaminated packing must be completely emptied and can be re-used following appropriate cleaning.  
Packing which cannot be properly cleaned must be thrown away. Waste disposal according to official state regulations.

### SECTION 14: Transport information

#### **Land transport (ADR/RID)**

14.1. UN number: -

#### **Inland waterways transport (ADN)**

14.1. UN number: -

#### **Marine transport (IMDG)**

14.1. UN number: -

#### **Air transport (ICAO)**

14.1. UN number: -

#### 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

#### **Other applicable information**

Not a hazardous material with respect to these transportation regulations.

### SECTION 15: Regulatory information

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

##### **National regulatory information**

Water contaminating class (D): 2 - water contaminating

#### 15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

### SECTION 16: Other information

#### **Full text of R phrases referred to under Sections 2 and 3**

|       |                                  |
|-------|----------------------------------|
| 36    | Irritating to eyes.              |
| 36/38 | Irritating to eyes and skin.     |
| 50    | Very toxic to aquatic organisms. |
| 51    | Toxic to aquatic organisms.      |

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- |       |   |
|-------|---|
| 52/53 | Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |
| 53    | May cause long-term adverse effects in the aquatic environment.                               |
| 60    | May impair fertility.   |

**Full text of H statements referred to under Sections 2 and 3**

- |      |   |
|------|---|
| H315 | Causes skin irritation.                                 |
| H319 | Causes serious eye irritation.                          |
| H360 | May damage fertility or the unborn child.               |
| 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.      |
| H413 | May cause long lasting harmful effects to aquatic life. |

**Further Information**

This preparation is hazardous in the sense of regulation (EC) No 1272/2008 [GHS].

These given data only refer to the named product. If the product is used together with other materials or in manufacturing processes the data might not be applicable any more. The data are based on today's state of our knowledge and experience. They are, however, no guarantee of any specific product properties and do not established any legally valid contractual relationship.

The receiver of our product is singularly responsible for adhering to existing laws and regulations.

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*(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*