

Safety Data Sheet

According to 1907/2006 EC - 453/2010 EC

Printing date 17.03.2014

Version number 3

Revision: 17.03.2014

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

- **Product identifier**
- **Trade name:** TITAN GEAR LS 90
- **Article number:** 600134082
- **Relevant identified uses of the substance or mixture and uses advised against**
- **Sector of Use**
 - SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites
 - SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
- **Application of the substance / the mixture** Lubricant
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
 - FUCHS LUBRICANTS (UK) PLC.
 - New Century Street
 - Hanley
 - Stoke-on-Trent, Staffordshire, ST1 5HU
 - UK
 - e-mail: product.safety@fuchs-oil.com
- **Further information obtainable from:** Product safety department.
- **Emergency telephone number:**
 - Fuchs Lubricants (UK) Emergency telephone: (UK) 01782 203700
 - NHS Direct: 0845 46 47 / Textphone: 0845 606 46 47

2 Hazards identification

- **Classification of the substance or mixture**
- **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 does not have 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.
- **Label elements**
- **Labelling according to EU guidelines:**
 - Observe the general safety regulations when handling chemicals.
 - The product is not subject to identification regulations under EU Directives and the Ordinance on Hazardous Materials (German GefStoffV).
- **Risk phrases:**
 - 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- **Safety phrases:**
 - 29 Do not empty into drains.
- **Special labelling of certain preparations:**
 - Contains Amine phosphate, Thiadiazole derivative. May produce an allergic reaction.
- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** A blend of highly refined mineral oils with multifunctional additives.

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· Dangerous components:		
EC number: 939-591-3	Reaction Products of alcohols, C14-18, C18 unsat., esterified with phosphorus pentoxide and salted with amines, C12-14,-tert-alkyl R52/53 Aquatic Chronic 3, H412	1-2.5%
EC number: 931-384-6 Reg.nr.: 01-2119493620-38-XXXX	Amine phosphate ☒ Xn R22; ☒ Xi R41; ☒ Xi R43; ☒ N R51/53 ☞ Flam. Liq. 3, H226; ☞ Eye Dam. 1, H318; ☞ Aquatic Chronic 2, H411; ☞ Acute Tox. 4, H302; Skin Sens. 1, H317	1-2.5%
EINECS: 204-015-5	Oleyl amine ☒ C R34; ☒ Xn R22-48/22; ☒ Xi R37; ☒ 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	0.25-1%
EC number: 939-460-0 Reg.nr.: 01-2119971727-23-XXXX	Thiadiazole derivative ☒ Xi R38-41; ☒ Xi R43 R52/53 ☞ Flam. Liq. 3, H226; ☞ Eye Dam. 1, H318; ☞ Skin Irrit. 2, H315; Skin Sens. 1, H317; Aquatic Chronic 3, H412	<0.25%

· **SVHC** None· **Additional information:**

Annex I Nota L applies to the base oil(s) in this product. Nota L - The classification as a carcinogen need not apply if it can be shown that the substance contains less than 3 % DMSO extract as measured by IP 346. For the wording of the listed phrases refer to section 16.

4 First aid measures

· **Description of first aid measures**· **General information:** Immediately remove any clothing soiled by the product.· **After inhalation:** Supply fresh air; consult doctor in case of complaints.· **After skin contact:**

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

· **After eye contact:**

Check for and remove any contact lenses.

Rinse opened eye for several minutes under running water.

· **After swallowing:**

Wash mouth out with water

Seek medical treatment.

· **Information for doctor:** Treat symptomatically· **Most important symptoms and effects, both acute and delayed** No further relevant information available.· **Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

5 Firefighting measures

· **Extinguishing media**· **Suitable extinguishing agents:**CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Use fire extinguishing methods suitable to surrounding conditions.

· **For safety reasons unsuitable extinguishing agents:** Water with full jet· **Special hazards arising from the substance or mixture** No further relevant information available.

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- **Advice for firefighters**
- **Protective equipment:**
 - Wear self-contained respiratory protective device.
 - Wear fully protective suit.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
 - Particular danger of slipping on leaked/spilled product.
- **Environmental precautions:**
 - Do not allow to penetrate the ground/soil.
 - Prevent from spreading (e.g. by damming-in or oil barriers).
 - Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
 - Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
 - Send for recovery or disposal in suitable receptacles.
- **Reference to other sections** No dangerous substances are released.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling** Prevent formation of aerosols.
- **Information about fire - and explosion protection:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Prevent any seepage into the ground.
- **Information about storage in one common storage facility:** Store away from oxidizing agents.
- **Further information about storage conditions:** Store in cool, dry conditions in well sealed receptacles.
- **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.
- **Control parameters**
- **Ingredients 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.
- **Additional Occupational Exposure Limit Values for possible hazards during processing:**
 - Exposure limits/standards for materials that can be formed when handling this product:
 - When mists / aerosols can occur, the following are recommended:
 - 5 mg/m³ - ACGIH TLV, 10 mg/m³ - ACGIH STEL.
- **Additional information:** The lists valid during the making were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
 - Select PPE appropriate for the operations taking place taking into account the product properties.
- **General protective and hygienic measures:**
 - The usual precautionary measures are to be adhered to when handling chemicals.
 - Immediately remove all soiled and contaminated clothing
 - Do not carry product impregnated cleaning cloths in trouser pockets.
 - Avoid close or long term contact with the skin.
 - Do not eat, drink, smoke or sniff while working.
 - Wash hands before breaks and at the end of work.
- **Respiratory protection:**
 - Respiratory protection will be necessary only in special cases (e.g. formation of mists). A half or full face respirator with combined dust/organic vapour filter(s), or a Self-Contained Breathing Apparatus (SCBA) can

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be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.

· **Protection of hands:**



Protective gloves (EN374)

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **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

Neoprene gloves

· **Not suitable are gloves made of the following materials:**

Butyl rubber, BR

Natural rubber, NR

· **Eye protection:** Safety glasses (EN166) recommended during refilling

· **Body protection:** Oil resistant protective clothing

9 Physical and chemical properties

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

· **General Information**

· **Appearance:**

Form: Fluid

Colour: Brown

· **Odour:** Mineral-oil-like

· **Change in condition**

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: Undetermined.

· **Flash point:** > 100 °C

· **Ignition temperature:** >250 °C

· **Self-igniting:** Product is not selfigniting.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Density at 15 °C:** 0.918 g/cm³

· **Solubility in / Miscibility with**

water: Not miscible or difficult to mix.

· **Viscosity:**

Dynamic: Not determined.

Kinematic at 40 °C: 200 mm²/s

· **Other information**

No further relevant information available.

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10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** Naked flames, hot surfaces and other high temperature sources
- **Incompatible materials:** Strong oxidising agents.
- **Hazardous decomposition products:**
Carbon monoxide and carbon dioxide
Sulphur oxides (SO_x)

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:**
Experimental data has shown that the concentration of potentially sensitizing components present in this product does not induce skin sensitization.
- **Additional toxicological information:**
The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.
When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

12 Ecological information

- **Toxicity**

- **Aquatic toxicity:**

Amine phosphate	
EC50/48 h	91.4 mg/l (daphnia)
LC50/96 h	24 mg/l (fish)

- **Persistence and degradability** Inherently biodegradable
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** Product is not expected to bioaccumulate.
- **Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Harmful to fish
- **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 course or sewage system.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

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13 Disposal considerations

- **Waste treatment methods**

- **Recommendation**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Contact waste processors for recycling information.

Delivery of waste oil to officially authorized collectors only.

Used, degraded or contaminated product may be classified as hazardous waste. Anyone classifying hazardous waste and determining its fate must be qualified in accordance with state and international legislation.

- **European waste catalogue**

13 02 05*	mineral-based non-chlorinated engine, gear and lubricating oils
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- **Uncleaned packaging:**

- **Recommendation:**

Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.

Disposal must be made according to official regulations.

EWC 15 01 02 (plastic) or 15 01 04 (metal)

Containers, even those that are "empty," may contain residues that can develop flammable vapours upon heating. Do not cut, drill, grind, weld, or perform similar operations on or near empty containers.

14 Transport information

- **UN-Number**

· ADR, ADN, IMDG, IATA	Void
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- **UN proper shipping name**

· ADR, ADN, IMDG, IATA	Void
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- **Transport hazard class(es)**

· ADR, ADN, IMDG, IATA	Void
· Class	

- **Packing group**

· ADR, IMDG, IATA	Void
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- **Environmental hazards:**

· Marine pollutant:	No
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· Special precautions for user	Not applicable.
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- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable to packaged goods.

· Transport/Additional information:	Not dangerous according to the above specifications.
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15 Regulatory information

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

- **National regulations:**

- **Other regulations, limitations and prohibitive regulations**

- **Substances of very high concern (SVHC) according to REACH, Article 57** None

- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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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.

This data sheet is a Safety Data Sheet in accordance with 1907/2006/EC - 453/2010/EC, Article 31.

For products which are not subject to classification according to EU lists, this data sheet is supplied on a voluntary basis.

· **Relevant phrases**

- The Hazard / Risk phrases shown below are for those component substances which are listed in section 3 and not necessarily for the finished formulation.

- Hazards are concentration dependent. Therefore for the hazard classification and risk/safety phrases appropriate for the actual finished formulated product refer to section 2.

H226 Flammable liquid and vapour.

H302 Harmful if swallowed.

H304 May be fatal if swallowed and enters airways.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

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.

H412 Harmful to aquatic life with long lasting effects.

R22 Harmful if swallowed.

R34 Causes burns.

R37 Irritating to respiratory system.

R38 Irritating to skin.

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.

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

· **Department issuing SDS:** Product safety department.

· **Contact:** STEVEN PRITCHARD

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