

## SAFETY DATA SHEET

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758

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

#### 1.1 Product identifier

**Product name:** TITAN FFL-4

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

**Identified uses:** Lubricant

**Uses advised against:** No uses advised against identified.

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

**Manufacturer / Supplier** FUCHS LUBRICANTS (UK) PLC.  
New Century Street  
ST1 5HU Hanley

**Telephone:** +44 (0) 1782 203700

**Contact Person:** Product Safety department

**E-mail:** product.safety@fuchs.com  
**Telephone:** +44 (0) 1782 203700

**1.4 Emergency telephone number:** UK NHS: Dial 111

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

The product has been classified and labelled as hazardous according to regulation GB-CLP.

##### Classification according to GB-CLP.

###### Environmental Hazards

Chronic hazards to the aquatic environment

Category 3

H412: Harmful to aquatic life with long lasting effects.

###### Hazard summary

**Physical Hazards:** No data available.

#### 2.2 Label Elements

**Hazard Statement(s):** H412: Harmful to aquatic life with long lasting effects.

Product name: TITAN FFL-4

### Precautionary Statements

**Prevention:** P273: Avoid release to the environment.

**Disposal:** P501: Dispose of contents/ container to an approved facility in accordance with local, regional, national and international regulations.

**2.3 Other hazards:** By handling of mineral oil products and chemical products no particular hazard is known when normal precautions (item 7) and personal protective equipment (item 8) are kept. The product may not be released into the environment without control.

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

**General information:** Mixture containing severely refined base oils and additives.

Chemical name	Identifier	Concentration *	UK-REACH Registration No.	Notes
Hydrocarbons, low viscous	EC: 500-183-1	20,00% - <50,00%		
base oil, low viscous	EINECS: 276-738-4	20,00% - <50,00%		
Base oil paraffinic	EINECS: 265-157-1	1,00% - <10,00%		
Amine aromatic , alkylated	EINECS: 270-128-1	0,10% - <1,00%		
Alkyl amine	EC: 620-540-6	0,10% - <0,25%		
prim. alkanolamine ether	EC: 939-485-7	0,001% - <0,10%		
hydroxyethyl-alkylamine	EINECS: 276-014-8	0,01% - <0,10%		

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

PBT: persistent, bioaccumulative and toxic substance.

vPvB: very persistent and very bioaccumulative substance.

**Product name:** TITAN FFL-4

### Classification

Chemical name	Identifier	Classification
Hydrocarbons, low viscous	EC: 500-183-1	GBCLP: Asp. Tox. 1;H304
base oil, low viscous	EINECS: 276-738-4	GBCLP: Asp. Tox. 1;H304
Base oil paraffinic	EINECS: 265-157-1	GBCLP: Asp. Tox. 1;H304
Amine aromatic , alkylated	EINECS: 270-128-1	GBCLP: Repr. 2;H361f, Aquatic Chronic 3;H412
Alkyl amine	EC: 620-540-6	GBCLP: Skin Corr. 1C;H314, Eye Dam. 1;H318, Aquatic Acute 1;H400, Aquatic Chronic 1;H410, Acute Tox. 4;H302; M-Factor (aquatic acute): 10; M-Factor (aquatic chronic): 1
prim. alkanolamine ether	EC: 939-485-7	GBCLP: Acute Tox. 4;H302, Skin Corr. 1B;H314, Eye Dam. 1;H318, Aquatic Acute 1;H400, Aquatic Chronic 1;H410; M-Factor (aquatic acute): 100; M-Factor (aquatic chronic): 1
hydroxyethyl-alkylamine	EINECS: 276-014-8	GBCLP: Acute Tox. 4;H302, Skin Corr. 1C;H314, Eye Dam. 1;H318, Repr. 2;H361d, Aquatic Acute 1;H400, Aquatic Chronic 1;H410; M-Factor (aquatic acute): 10; M-Factor (aquatic chronic): 10

GB-CLP

Please note that the mineral oils and petroleum distillates used in our products are severely refined and have a DMSO extract < 3% as measured by method IP 346 and are not classified as carcinogenic according to Note L of Annex VI of Regulation GB-CLP.

## SECTION 4: First aid measures

**General:** Instantly remove any clothing soiled by the product.

### 4.1 Description of first aid measures

**Inhalation:** Supply fresh air; consult doctor in case of symptoms.

**Eye contact:** Promptly wash eyes with plenty of water while lifting the eye lids.

**Skin Contact:** Wash with soap and water.

**Ingestion:** Rinse mouth thoroughly.

**4.2 Most important symptoms and effects, both acute and delayed:** May cause skin and eye irritation.

**4.3 Indication of any immediate medical attention and special treatment needed** Get medical attention if symptoms occur.

## SECTION 5: Firefighting measures

**Product name:** TITAN FFL-4

## 5.1 Extinguishing media

**Suitable extinguishing media:**

CO<sub>2</sub>, fire extinguishing powder or fog like water spraying. Extinguish larger fires with alcohol resistant foam or spray water with suitable surfactant added

**Unsuitable extinguishing media:**

Water with a full water jet.

## 5.2 Special hazards arising from the substance or mixture:

During fire, gases hazardous to health may be formed.

## 5.3 Advice for firefighters

**Special fire-fighting procedures:**

Move container from fire area if it can be done without risk. Dispose of fire debris and contaminated fire fighting water in accordance with official regulations. Collect contaminated fire fighting water separately. It must not enter drains.

**Special protective equipment for fire-fighters:**

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

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures:

In case of spills, beware of slippery floors and surfaces.

### 6.2 Environmental Precautions:

Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Prevent from spreading (e.g. by binding or oil barriers). Environmental manager must be informed of all major spillages. Do not allow to enter drainage system, surface or ground water.

### 6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acidbinders, universal binders, sawdust). Dispose of the material collected according to regulations. Stop the flow of material, if this is without risk.

### 6.4 Reference to other sections:

See Section 8 of the SDS for Personal Protective Equipment. See Section 7 for information on safe handling See Section 13 for information on disposal.

## SECTION 7: Handling and storage:

### 7.1 Precautions for safe handling:

Prevent formation of aerosols. Do not eat, drink or smoke when working with the product. Take usual precautions when handling mineral oil products or chemical products. Observe good industrial hygiene practices. Provide adequate ventilation.

### 7.2 Conditions for safe storage, including any incompatibilities:

Local regulations concerning handling and storage of waterpolluting products have to be followed. Do not heat up to temperatures close to the flash point.

**Product name:** TITAN FFL-4

**7.3 Specific end use(s):** Not applicable

**Storage Class:** 10, Combustible liquids

## SECTION 8: Exposure controls/personal protection

### 8.1 Control Parameters

#### Occupational Exposure Limits

None of the components have assigned exposure limits.

### 8.2 Exposure controls

#### Appropriate engineering controls:

Provide adequate ventilation. 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:

Wash hands before breaks and after work. Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment. The usual precautionary measures should be adhered to in handling the chemicals or the mineral oil products.

##### Eye/face protection:

Safety glasses (EN 166) recommended during refilling. Avoid contact with skin and eyes. Goggles/face shield are recommended. If risk of splashing, wear safety goggles or face shield.

##### Skin protection

##### Hand Protection:

Material: Nitrile butyl rubber (NBR).  
Min. Breakthrough time:  $\geq 480$  min  
Recommended thickness of the material:  $\geq 0,38$  mm

Avoid long-term and repeated skin contact. Suitable gloves can be recommended by the glove supplier. Use skin protection cream for preventive skin protection. Protective gloves, where permitted in acc. to safety directions. The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

##### Other:

Do not carry cleaning cloths impregnated with the product in trouser pockets. Wear suitable protective clothing.

##### Respiratory Protection:

Ensure good ventilation/exhaustion at the workplace. Avoid breathing vapour/ aerosol.

##### Thermal hazards:

Not known.

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**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 to remove contaminants. Discard contaminated footwear that cannot be cleaned.

**Environmental Controls:** No data available.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### Appearance

<b>Physical state:</b>	liquid
<b>Color:</b>	Brown
<b>Odor:</b>	Characteristic
<b>pH:</b>	substance/mixture is non-soluble (in water)
<b>Freezing point:</b>	not determined
<b>Boiling Point:</b>	not determined
<b>Flash Point:</b>	220 °C
<b>Evaporation Rate:</b>	Not applicable for mixtures
<b>Flammability (solid, gas):</b>	not determined
<b>Flammability Limit - Upper (%)—:</b>	Not applicable for mixtures
<b>Flammability Limit - Lower (%)—:</b>	Not applicable for mixtures
<b>Vapor pressure:</b>	Not applicable for mixtures
<b>Relative vapor density:</b>	Not applicable for mixtures
<b>Density:</b>	0,84 g/cm <sup>3</sup> (15 °C)

#### Solubility(ies)

<b>Solubility in Water:</b>	Insoluble in water
<b>Solubility (other):</b>	No data available.

**Partition coefficient (n-octanol/water):** Not applicable for mixtures

**Autoignition Temperature:** not determined

**Decomposition Temperature:** not determined

**Kinematic viscosity:** 34,7 mm<sup>2</sup>/s (40 °C)

**Explosive properties:** Value not relevant for classification

**Oxidizing properties:** Value not relevant for classification

**Particle characteristics:** Not applicable

**9.2 Other information** No data available.

## SECTION 10: Stability and reactivity

**10.1 Reactivity:** Stable under normal use conditions.

**10.2 Chemical Stability:** Stable under normal use conditions.

**10.3 Possibility of hazardous reactions:** Stable under normal use conditions.

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- 10.4 Conditions to avoid:** Stable under normal use conditions.
- 10.5 Incompatible Materials:** Strong oxidizing substances. Strong acids. Strong bases.
- 10.6 Hazardous Decomposition Products:** Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

##### Oral

**Product:** Not classified for acute toxicity based on available data.

**Specified substance(s)**

Hydrocarbons, low viscous LD 50 (Rat): > 5.000 mg/kg

base oil, low viscous LD 50 (Rat): > 5.001 mg/kg (OECD 401)

Base oil paraffinic LD 50 (Rat): > 5.000 mg/kg

Amine aromatic, alkylated LD 50 (Rat): > 5.000 mg/kg (OECD 401)

Alkyl amine LD 50 (Rat): 1.350 mg/kg (OECD 401)

hydroxyethyl-alkylamine LD 50 (Rat): 1.500 mg/kg

##### Dermal

**Product:** Not classified for acute toxicity based on available data.

**Specified substance(s)**

Base oil paraffinic LD 50 (Rabbit): > 5.000 mg/kg

##### Inhalation

**Product:** Not classified for acute toxicity based on available data.

**Specified substance(s)**

Hydrocarbons, low viscous LC 50 (Rat, 4 h): > 5 mg/l  
Dust and mist

##### Skin Corrosion/Irritation:

**Product:** Based on available data, the classification criteria are not met.

**Specified substance(s)**

Base oil paraffinic OECD 404  
Not irritant.

Alkyl amine OECD 404 (Rabbit, 14 d):  
Causes severe skin burns.

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**Serious Eye Damage/Eye Irritation:**

**Product:** Based on available data, the classification criteria are not met.

**Specified substance(s)**

Base oil paraffinic  
OECD 405  
Not irritant.

Amine aromatic , alkylated  
OECD 405 (Rabbit):  
Not irritant.

**Respiratory or Skin Sensitization:**

**Product:** Skin sensitizer: Based on available data, the classification criteria are not met.  
Respiratory sensitizer: Based on available data, the classification criteria are not met.

**Specified substance(s)**

Amine aromatic , alkylated  
No sensitizing effect (guinea pig); OECD 406

Alkyl amine  
No sensitizing effect (guinea pig); OECD 406

hydroxyethyl-alkylamine  
No sensitizing effect (guinea pig); OECD 406

**Germ Cell Mutagenicity**

**Product:** Based on available data, the classification criteria are not met.

**Carcinogenicity**

**Product:** Based on available data, the classification criteria are not met.

**Reproductive toxicity**

**Product:** Based on available data, the classification criteria are not met.

**Specific Target Organ Toxicity - Single Exposure**

**Product:** Based on available data, the classification criteria are not met.

**Specific Target Organ Toxicity - Repeated Exposure**

**Product:** Based on available data, the classification criteria are not met.

**Aspiration Hazard**

**Product:** Based on available data, the classification criteria are not met.

**Specified substance(s)**

Base oil paraffinic  
May be fatal if swallowed and enters airways.

**Other adverse effects:** No data available.



Product name: TITAN FFL-4

## SECTION 12: Ecological information

**General information:** Not applicable

### 12.1 Toxicity

#### Acute toxicity

**Product:** Based on available data, the classification criteria are not met.

#### Fish

##### Specified substance(s)

Hydrocarbons, low viscous	LC 50 (Fish, 96 h): > 750 mg/l
base oil, low viscous	LC 50 (Fish, 96 h): > 100 mg/l (OECD 203)
Base oil paraffinic	LC 50 (Fish, 96 h): > 100 mg/l
Amine aromatic, alkylated	LC 50 (Fish, 96 h): > 100 mg/l (OECD 203)
Alkyl amine	LC 50 (Fish, 96 h): 0,1 mg/l (OECD 203)
hydroxyethyl-alkylamine	LC 50 (Fish, 96 h): 0,1 mg/l (OECD 203)

#### Aquatic Invertebrates

##### Specified substance(s)

Hydrocarbons, low viscous	EC 50 (Water Flea, 48 h): 190 mg/l
Base oil paraffinic	EC 50 (Water Flea, 48 h): > 100 mg/l
Amine aromatic, alkylated	EC 50 (Daphnia magna): 51 mg/l (OECD 202)
Alkyl amine	EC 50 (Water Flea, 48 h): 0,043 mg/l (OECD 202)
hydroxyethyl-alkylamine	EC 50 (Water Flea, 48 h): 0,48 mg/l (OECD 202)

#### Chronic Toxicity

**Product:** Based on available data, the classification criteria are met.

#### Fish

##### Specified substance(s)

base oil, low viscous	NOEC (Fish, 14 d): > 1.000 mg/l
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#### Aquatic Invertebrates

##### Specified substance(s)

base oil, low viscous	NOEC (Water Flea, 21 d): 10 mg/l (OECD 211)
Base oil paraffinic	NOEC (Daphnia magna, 21 d): 10 mg/l (OECD 211)
Alkyl amine	EC 10 (Water Flea, 21 d): 0,0107 mg/l (OECD 211)

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hydroxyethyl-alkylamine EC 10 (Water Flea, 21 d): 0,279 mg/l (OECD 211)

## Toxicity to Aquatic Plants

### Specified substance(s)

Hydrocarbons, low viscous	EC 50 (Alga, 72 h): > 1.000 mg/l
base oil, low viscous	NOEC (Alga, 72 h): > 100 mg/l (OECD 201)
Base oil paraffinic	EC 50 (Algae, 72 h): > 100 mg/l (OECD 201)
Amine aromatic , alkylated	EC 50 (72 h): > 100 mg/l (OECD 201)
Alkyl amine	EC 50 (Alga, 72 h): 0,0538 mg/l (OECD 201) NOEC (Alga, 72 h): 0,0156 mg/l
hydroxyethyl-alkylamine	EC 50 (Alga, 72 h): 0,107 mg/l (OECD 201) EC 10 (Alga, 72 h): 0,0092 mg/l (OECD 201)

## 12.2 Persistence and Degradability

### Biodegradation

<b>Product:</b>	Not applicable for mixtures
<b>Specified substance(s)</b>	
Amine aromatic , alkylated	Not readily degradable.
Alkyl amine	63 % (28 d, OECD 301D) Readily biodegradable
hydroxyethyl-alkylamine	> 60 % (28 d, OECD 301B) Readily biodegradable

## 12.3 Bioaccumulative potential

<b>Product:</b>	Not applicable for mixtures
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## 12.4 Mobility in soil:

<b>Product:</b>	Not applicable for mixtures
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## 12.5 Results of PBT and vPvB assessment:

The product does not contain any substances fulfilling the PBT/vPvB criteria.

## 12.6 Other adverse effects:

Harmful to aquatic life with long lasting effects.

### Water Hazard Class (WGK):

WGK 2: significantly water-endangering.

Product name: TITAN FFL-4

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

**General information:** Dispose in accordance with all applicable regulations.

**Disposal methods:** Discharge, treatment, or disposal may be subject to national, state, or local laws.

#### List of Waste (LoW) Codes

13 02 06\*: synthetic engine, gear and lubricating oils

## SECTION 14: Transport information

### ADR/RID

14.1 UN number or ID number:	—
14.2 UN Proper Shipping Name:	—
14.3 Transport Hazard Class(es)	
Class:	Non-dangerous goods
Label(s):	—
Hazard No. (ADR):	—
Tunnel restriction code:	—
14.4 Packing Group:	—
14.5 Environmental hazards:	—
14.6 Special precautions for user:	—

### IMDG

14.1 UN number or ID number:	—
14.2 UN Proper Shipping Name:	—
14.3 Transport Hazard Class(es)	
Class:	Non-dangerous goods
Label(s):	—
EmS No.:	—
14.3 Packing Group:	—
14.5 Environmental hazards:	—
14.6 Special precautions for user:	—

### IATA

14.1 UN number or ID number:	—
14.2 Proper Shipping Name:	—
14.3 Transport Hazard Class(es):	
Class:	Non-dangerous goods
Label(s):	—
14.4 Packing Group:	—
14.5 Environmental hazards:	—
14.6 Special precautions for user:	—

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

Product name: TITAN FFL-4

## SECTION 15: Regulatory information

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

#### GB Regulations

**The Ozone-Depleting Substances and Fluorinated Greenhouse Gases (Amendment etc.) (EU Exit) Regulations 2019:**

none

**The Persistent Organic Pollutants (Amendment) (EU Exit) Regulations 2020:**

none

### 15.2 Chemical safety assessment:

No Chemical Safety Assessment has been carried out.

### DIRECTIVE Control of Major Accident Hazards Regulations 2015:

Not applicable

## SECTION 16: Other information

**Revision Information:** Vertical lines in the margin indicate an amendment.

### Wording of the H-statements in section 2 and 3

H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H361d	Suspected of damaging the unborn child.
H361f	Suspected of damaging fertility.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

**Other information:** The classification complies with the current GB lists; however, it has been supplemented with expert literature information and information provided by/about our company. The following evaluation methods were used: On the basis of test data; Calculation Method; Bridging Principle "Substantially similar mixtures"; Expert Judgement

**Revision Date:** 06.03.2023

**Product name:** TITAN FFL-4

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**Disclaimer:**

The data contained in this safety data sheet are based on our current knowledge and experience and are given to the best of our knowledge and belief. It characterizes the product only with regard to safety requirements for handling, transport and disposal. The data do not describe the product's properties (tech. product specification). Neither should any agreed property nor the suitability of the product for any specific technical application be deduced from the data contained in this safety data sheet. Modifications on this document are not allowed. The data are not transferable to other products. In the case of mixing the product with other products or in the case of processing, the data in this safety data sheet are not necessarily valid for the new-made material. It is the responsibility of the recipient of the product to observe federal, state and local law. Please contact us to obtain up-to-date safety data sheets. This document was issued electronically and has no signature.