

Safety Data Sheet



NON-Hazardous, NON-Dangerous Goods

1. MATERIAL AND SUPPLY COMPANY IDENTIFICATION

Product name: TITAN FFL-4

Recommended use: Lubricant.

Supplier: Fuchs Lubricants (Australasia) Pty Ltd
Street Address: Head Office
49 McIntyre Road
Sunshine VIC 3020
Australia

Telephone: +61 3 9300 6400 (Australia)
+64 6 828 3255 (New Zealand)

Website: www.fuchs.com.au

Email: sds.au@fuchs.com

Emergency Telephone number: Australia 1800 638 556 (24hr)
New Zealand 0800 154 166 (24hr)

2. HAZARDS IDENTIFICATION

Based on available information, this material is not classified as hazardous according to criteria of Safe Work Australia GHS 7.

Signal Word

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Hazard Classification

Chronic Hazard to the Aquatic Environment - Category 3

Hazard Statement

H412 Harmful to aquatic life with long lasting effects.

Prevention Precautionary Statement

P273 Avoid release to the environment.

Response Precautionary Statement

Not allocated

Storage Precautionary Statement

Not allocated

Disposal Precautionary Statement

P501 Dispose of contents/container in accordance with local, regional, national and international regulations.

Poison Schedule: Not Applicable

DANGEROUS GOOD CLASSIFICATION

Not classified as Dangerous Goods by the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and the "New Zealand NZS5433: Transport of Dangerous Goods on Land".

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3. COMPOSITION INFORMATION

CHEMICAL ENTITY	CAS NO	PROPORTION
Mixture containing severely refined base oils and additives.		
Hydrocarbons, low viscous	68037-01-4	20-<50 %
Base oil, low viscous	72623-87-1	20-<50 %
Alkyl amine	1218787-32-6	0.1-<0.25 %
Prim. alkanolamine ether	218141-16-3	0.01-<0.1 %
Hydroxyethyl-alkylamine	71786-60-2	0.01-<0.1 %
Ingredients determined to be non-hazardous		Balance
		100%

4. FIRST AID MEASURES

If poisoning occurs, contact a doctor or Poisons Information Centre (Phone Australia 131 126, New Zealand 0800 764 766).

Inhalation: Remove victim from exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. Seek medical advice if effects persist.

Skin Contact: If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. If swelling, redness, blistering or irritation occurs seek medical assistance.

Eye contact: If in eyes wash out immediately with water. In all cases of eye contamination it is a sensible precaution to seek medical advice.

Ingestion: Rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water to drink. Never give anything by the mouth to an unconscious patient. If vomiting occurs give further water. Seek medical advice.

PPE for First Aiders: Wear safety shoes, overalls, gloves, safety glasses. Available information suggests that gloves made from nitrile rubber should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

Notes to physician: Treat symptomatically.

5. FIRE FIGHTING MEASURES

Hazchem Code: Not applicable.

Suitable extinguishing media: If material is involved in a fire use water fog (or if unavailable fine water spray), alcohol resistant foam, standard foam, dry agent (carbon dioxide, dry chemical powder).

Specific hazards: Combustible material.

Fire fighting further advice: On burning or decomposing may emit toxic fumes. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion or decomposition.

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6. ACCIDENTAL RELEASE MEASURES

SMALL SPILLS

Wear protective equipment to prevent skin and eye contamination. Avoid inhalation of vapours or dust. Wipe up with absorbent (clean rag or paper towels). Collect and seal in properly labelled containers or drums for disposal.

LARGE SPILLS

Clear area of all unprotected personnel. Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contamination and the inhalation of vapours. Work up wind or increase ventilation. Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Collect and seal in properly labelled containers or drums for disposal. If contamination of crops, sewers or waterways has occurred advise local emergency services.

Dangerous Goods - Initial Emergency Response Guide No: Not applicable

7. HANDLING AND STORAGE

Handling: Avoid eye contact and repeated or prolonged skin contact. Avoid inhalation of vapour, mist or aerosols.

Storage: Store in a cool, dry, well-ventilated place and out of direct sunlight. Store away from foodstuffs. Store away from incompatible materials described in Section 10. Store away from sources of heat and/or ignition. Keep container standing upright. Keep containers closed when not in use - check regularly for leaks.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

National occupational exposure limits:

	TWA		STEL		NOTICES
	ppm	mg/m3	ppm	mg/m3	
Oil mist, refined mineral	-	5	-	-	-

As published by Safe Work Australia.

TWA - The time-weighted average airborne concentration over an eight-hour working day, for a five-day working week over an entire working life.

STEL (Short Term Exposure Limit) - the average airborne concentration over a 15 minute period which should not be exceeded at any time during a normal eight-hour workday.

These Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

If the directions for use on the product label are followed, exposure of individuals using the product should not exceed the above standard. The standard was created for workers who are routinely, potentially exposed during product manufacture.

Biological Limit Values: As per the "National Model Regulations for the Control of Workplace Hazardous Substances (Safe Work Australia)" the ingredients in this material do not have a Biological Limit Allocated.

Engineering Measures: Ensure ventilation is adequate to maintain air concentrations below Exposure Standards. Use only in well ventilated areas. Use with local exhaust ventilation or while wearing appropriate respirator.

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Personal Protection Equipment: SAFETY SHOES, OVERALLS, GLOVES, SAFETY GLASSES.

Personal protective equipment (PPE) must be suitable for the nature of the work and any hazard associated with the work as identified by the risk assessment conducted.

Wear safety shoes, overalls, gloves, safety glasses. Available information suggests that gloves made from nitrile rubber should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

Hygiene measures: Keep away from food, drink and animal feeding stuffs. When using do not eat, drink or smoke. Wash hands prior to eating, drinking or smoking. Avoid contact with clothing. Avoid eye contact and repeated or prolonged skin contact. Avoid inhalation of vapour, mist or aerosols. Ensure that eyewash stations and safety showers are close to the workstation location.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form: Liquid
Colour: Brown
Odour: Characteristic

Solubility in water: Insoluble
Density: 0.84 g/cm³ @ 15°C
Relative Vapour Density (air=1): N Av
Vapour Pressure (20 °C): N Av
Flash Point (°C): 220
Flammability Limits (%): N Av
Pour Point/Range (°C): N Av
Boiling Point/Range (°C): N Av
pH: N App
Viscosity: 34.7 mm²/s @ 40°C
Total VOC (g/Litre): N Av

(Typical values only - consult specification sheet)
N Av = Not available, N App = Not applicable

10. STABILITY AND REACTIVITY

Chemical stability: This material is thermally stable when stored and used as directed.

Conditions to avoid: Elevated temperatures and sources of ignition.

Incompatible materials: Strong oxidizing substances. Strong acids. Strong bases.

Hazardous decomposition products: Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

Hazardous reactions: No known hazardous reactions.

11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

Acute Effects

Inhalation: Material may be an irritant to mucous membranes and respiratory tract.

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Skin contact: Contact with skin may result in irritation.

Ingestion: Swallowing can result in nausea, vomiting and irritation of the gastrointestinal tract.

Eye contact: May be an eye irritant.

Acute toxicity

Inhalation: This material has been classified as not hazardous for acute inhalation exposure. Acute toxicity estimate (based on ingredients): LC₅₀ > 20.0 mg/L for vapours or LC₅₀ > 5.0 mg/L for dust and mist.

Specified substance(s)

Hydrocarbons, low viscous - LC50 (Rat, 4h): >5 mg/l - Dust and mist

Skin contact: This material has been classified as not hazardous for acute dermal exposure. Acute toxicity estimate (based on ingredients): LD₅₀ > 2,000 mg/Kg bw

Ingestion: This material has been classified as not hazardous for acute ingestion exposure. Acute toxicity estimate (based on ingredients): LD₅₀ > 2,000 mg/Kg bw

Specified substance(s)

Hydrocarbons, low viscous - LD50 (Rat): >5000 mg/kg

Base oil, low viscous - LD50 (Rat): >5001 mg/kg (OECD 401)

Alkyl amine - LD50 (Rat): 1350 mg/kg (OECD 401)

Hydroxyethyl-alkylamine - LD50 (Rat): 1500 mg/kg

Corrosion/Irritancy: Eye: this material has been classified as not corrosive or irritating to eyes. Skin: this material has been classified as not corrosive or irritating to skin.

Specified substance(s)

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

Sensitisation: Inhalation: this material has been classified as not a respiratory sensitiser. Skin: this material has been classified as not a skin sensitiser.

Specified substance(s)

Alkyl amine - Guinea pig - No sensitising effect. (OECD 406)

Hydroxyethyl-alkylamine - Guinea pig - No sensitising effect. (OECD 406)

Aspiration hazard: This material has been classified as not an aspiration hazard.

Specific target organ toxicity (single exposure): This material has been classified as not a specific hazard to target organs by a single exposure.

Chronic Toxicity

Mutagenicity: This material has been classified as not a mutagen.

Carcinogenicity: This material has been classified as not a carcinogen.

Reproductive toxicity (including via lactation): This material has been classified as not a reproductive toxicant.

Specific target organ toxicity (repeat exposure): This material has been classified as not a specific hazard to target organs by repeat exposure.

12. ECOLOGICAL INFORMATION

Avoid contaminating waterways.

Acute aquatic hazard: This material has been classified as not hazardous for acute aquatic exposure. Acute toxicity estimate (based on ingredients): > 100 mg/L

Fish

Specified substance(s)

- Hydrocarbons, low viscous - LC50 (Fish, 96h): >750 mg/l
- Base oil, low viscous - LC50 (Fish, 96h): >100 mg/l (OECD 203)
- Alkyl amine - LC50 (Fish, 96h): 0.1 mg/l (OECD 203)
- Hydroxyethyl-alkylamine - LC50 (Fish, 96h): 0.1 mg/l (OECD 203)

Aquatic Invertebrates

Specified substance(s)

- Hydrocarbons, low viscous - EC50 (Water Flea, 48h): 190 mg/l
- Alkyl amine - EC50 (Water Flea, 48h): 0.043 mg/l (OECD 202)
- Hydroxyethyl-alkylamine - EC50 (Water Flea, 48h): 0.48 mg/l (OECD 202)

Long-term aquatic hazard: This material has been classified as a Category Chronic 3 Hazard. Non-rapidly or rapidly degradable substance for which there are adequate chronic toxicity data available OR in the absence of chronic toxicity data, Acute toxicity estimate (based on ingredients): 10 - 100 mg/L, where the substance is not rapidly degradable and/or BCF \geq 500 and/or log $K_{ow} \geq$ 4.

Fish

Specified substance(s)

- Base oil, low viscous - NOEC (Fish, 14d): >1000 mg/l

Aquatic Invertebrates

Specified substance(s)

- Base oil, low viscous - NOEC (Water Flea, 21d): 10 mg/l (OECD 211)
- Alkyl amine - EC10 (Water Flea, 21d): 0.0107 mg/l (OECD 211)
- Hydroxyethyl-alkylamine - EC10 (Water Flea, 21d): 0.279 mg/l (OECD 211)

Toxicity to Aquatic Plants

Specified substance(s)

- Hydrocarbons, low viscous - EC50 (Alga, 72h): >1000 mg/l
- Base oil, low viscous - NOEC (Alga, 72h): >100 mg/l (OECD 201)
- Alkyl amine - EC50 (Alga, 72h): 0.0538 mg/l (OECD 201)
- NOEC (Alga, 72 h): 0.0156 mg/l
- Hydroxyethyl-alkylamine - EC50 (Alga, 72h): 0.107 mg/l (OECD 201)
- EC10 (Alga, 72h): 0.0092 mg/l (OECD 201)

Ecotoxicity: No information available.

Persistence and degradability: No information available.

Biodegradation

Specified substance(s)

- Alkyl amine - 63%, 28d - Readily biodegradable. (OECD 301D)
- Hydroxyethyl-alkylamine - >60%, 28d - Readily biodegradable. (OECD 301B)

Bioaccumulative potential: No information available.

Mobility: No information available.

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13. DISPOSAL CONSIDERATIONS

Persons conducting disposal, recycling or reclamation activities should ensure that appropriate personal protection equipment is used, see "Section 8. Exposure Controls and Personal Protection" of this SDS.

If possible material and its container should be recycled. If material or container cannot be recycled, dispose in accordance with local, regional, national and international Regulations.

14. TRANSPORT INFORMATION

ROAD AND RAIL TRANSPORT

Not classified as Dangerous Goods by the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and the "New Zealand NZS5433: Transport of Dangerous Goods on Land".

MARINE TRANSPORT

Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

AIR TRANSPORT

Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

15. REGULATORY INFORMATION

This material/constituent(s) is covered by the following requirements:

The Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) established under the Therapeutic Goods Act (Commonwealth): Not Applicable.

AICIS Status: All components of this product are listed on or exempt from the Australian Inventory of Industrial Chemicals (AIIC).

NZ EPA Status: All components of this product are listed on or exempt from the New Zealand Inventory of Chemical (NZIoC).

HSNO Group Standard: HSR002606 - Lubricants, Lubricant Additives, Coolants and Anti-freeze Agents (Subsidiary Hazard) Group Standard 2020

16. OTHER INFORMATION

Reason for issue: Revised

This information was prepared in good faith from the best information available at the time of issue. It is based on the present level of research and to this extent we believe it is accurate. However, no guarantee of accuracy is made or implied and since conditions of use are beyond our control, all information relevant to usage is offered without warranty. The manufacturer will not be held responsible for any unauthorised use of this information or for any modified or altered versions.

If you are an employer it is your duty to tell your employees, and any others that may be affected, of any hazards described in this sheet and of any precautions that should be taken.

Safety Data Sheets are updated frequently. Please ensure you have a current copy.