PRODUCT INFORMATION

TITAN SUPER XT SERIES

High Performance Monograde Motor Oil for Trucks, Heavy Duty Construction Equipment and Passengers Cars

Description

- Monograde Motor Oil
- For diesel engines with or without turbocharging in commercial vehicles and construction machinery as well as passenger cars requiring API CF quality.

Application

TITAN SUPER XT Series is fully miscible with all mineral and synthetic based motor oils. No flushing is therefore necessary.

Specifications

- API CF/CD
- MACK T8-A
- Titan Super XT 10W in particular meet the specification of CAT TO-2

Advantages/Benefits

- Outstanding protection against the formation of deposits in the engine
- Reliable protection against corrosion.
- High thermal and mechanical stability.
- No loss of performance as a result of unwanted deposits on injecting nozzles and in turbochargers or spark plugs.
- Even at full throttle operation in high ambient temperatures, **TITAN SUPER XT Series** oil provide a very stable and reliable lubricating film.
- Compatible with all gaskets and seals.
- Exceeds the performance requirements of API CF classification.

CHARACTERISTICS

PROPERTIES	METHOD	UNIT	SAE 10W	SAE 30	SAE40	SAE 50
Kinematic Viscosity @ 40^0C	ASTM D 445	cSt	36.64	89.33	122.6	173.17
Kinematic Viscosity @ 100^0C	ASTM D 445	cSt	5.59	10.42	14.36	19.48
Viscosity Index (VI)	ASTM D 2270	-	96	98	117	129
Total Base Number (TBN)	ASTM D 2896	mg KOH/g	10.38	10.38	10.38	10.38
Color	ASTM D 1500	-	L 2.5	L 2.5	L 2.5	L 2.5
Density @ 15^0C	ASTM D 1298	g/ml	0.8758	0.8848	0.8829	0.8822
Flash Point (COC)	ASTM D 92	^{0}C	212	250	240	240
Appearance	VISUAL	-	CLEAR	CLEAR	CLEAR	CLEAR

While the information and figures given here are typical of current production and confirm to specification, minor variations may occur. No warranty expressed or implied is given concerning the accuracy of the information or the suitability of the products.

NOHSC 16 Section

Material Safety Data Sheet

TITAN UNIVERSAL HD 30

Infosafe™ No. 5FV9T **Issue Date** January 2013 **Status** ISSUED by FUCHS BS: 1.16.148

Not classified as hazardous according to criteria of NOHSC

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name	TITAN UNIVERSAL HD 30
Product Code	2740
Company Name	FUCHS LUBRICANTS (AUSTRALASIA) PTY LTD (ABN 88 005 681 916)
Address	49 McINTYRE ROAD SUNSHINE VIC 3020
Emergency Tel.	1800 638 556 (24hr AUST) 0800 154 166 (24hr NZ)
Telephone/Fax Number	Tel: +61 (0)3 9300 6400 Fax: +61 (0)3 9300 6401
Recommended Use	Passenger car motor oil.
Other Names	None Listed
Other Information	Fuchs Lubricants (New Zealand) Limited Harbourside Business Park 485C Rosebank Road AVONDALE AUCKLAND 1026 Phone: +64 9 828 3255 Fax: +64 9 830 3643 . Visit our website: www.fuchs.com.au Orders Freecall (in Australia): 1800 1800 13 Orders Freecall (in New Zealand): 0800 382 476

2. HAZARDS IDENTIFICATION

Hazard Classification

AUSTRALIA
Not classified as hazardous according to the criteria of the NOHSC.
Not classified as dangerous goods according to the ADG Code.
NEW ZEALAND
Not classified as hazardous according to the Hazardous Substance (Minimum Degree of Hazard) regulations 2001.

Route(s) of Entry

Routes of entry can be skin, inhalation and ingestion.

Irritancy of Product

Not expected to be a primary irritant.Prolonged or repeated skin contact as from clothing wet from material may cause dermatitis in some cases. Symptoms may include redness, edema, drying and cracking of the skin.
Not expected to be a toxic inhalation hazard.

Teratogenicity

The product is classified as non hazardous.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Characterization

Liquid.

Information on Composition

Ingredients

Name	CAS	Proportion
Mineral Oil	Not required	70-100 %
Zinc alkyl dithiophosphate	68649-42-3	0-10 %
Other ingedients determined not to be hazardous	n/applicable	To 100%

4. FIRST AID MEASURES

Inhalation

Remove victim from exposure - avoid becoming a casualty.
Allow patient to assume most comfortable position and keep warm.
Keep at
rest until fully recovered.
For all but the most minor symptoms arrange for patient to be seen by a
doctor as soon as possible - either on site or at the nearest

hospital.

Ingestion DO NOT induce vomiting because of risk of aspiration.
Rinse mouth thoroughly with water immediately. Give water to drink and seek
immediate medical assistance. Should vomiting occur, hold patient with head
below the hips to prevent pulmonary aspiration.

Skin Wash with plenty of soap and water. Seek medical advice if effects persist.
Wash skin with water immediately and remove contaminated clothing and shoes. Get medical
attention if any symptoms develop. To remove the material from skin, apply a waterless hand cleaner,
mineral oil, or petroleum jelly. Then wash with soap and water. Discard contaminated clothing and
shoes or thoroughly clean before reuse. If the hot material gets on skin, quickly cool in water. See a
doctor for extensive burns. Do not try to peel the solidified material from the skin, or use solvents or
thinners to dissolve it. The use of vegetable oil or mineral oil is recommended for removal of this
material from the skin.

Eye Immediately irrigate with copious quantities of water for at least 15
minutes. Eyelids to be held open.
In all cases of eye contamination it is a sensible precaution to seek
medical assistance. Transport to hospital or medical centre.

First Aid Facilities Normal washroom facilities.

Advice to Doctor Treat symptomatically.

5. FIRE FIGHTING MEASURES

Fire Fighting Measures Flash point: >200°C PMCC

Suitable Extinguishing Media Use CO2, dry chemical or foam.

Hazards from Combustion Products Combustion products include oxides of carbon, nitrogen, phosphorous and sulphur as well as unidentified organic and inorganic compounds.

Specific Methods On burning will emit toxic fumes. Fire fighters to wear self-contained breathing apparatus if risk of exposure to products of decomposition.

Specific Hazards	Upon heating, toxic fumes are formed.
Hazchem Code	N/A
Other Information	LEL/UEL: Not Determined. Auto ignition temperature: Not Determined. NFPA Hazard ID: Health: 0, Flammability: 1, Reactivity: 0

6. ACCIDENTAL RELEASE MEASURES

Spills & Disposal	Contain - prevent contamination of drains and waterways and soil. Use absorbent (soil or sand, sawdust, inert material, vermiculite). Collect and seal in properly labelled drums for disposal. Dispose of waste as per Local, State and Federal Land Waste Management Authorities. (Victoria:MMBW (03) 9615 6099)

7. HANDLING AND STORAGE

Precautions for Safe Handling	No special precautions are nrcessary beyond normal good hygiene practices.
Conditions for Safe Storage	Do not store in open or unlabelled containers. Store away from strong oxidising agents or combustible material.
Additional information on precautions for use	Observe standard safety precautions and good work practices. Do not continue to use contaminated clothing

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

National Exposure Standards	No value assigned for this specific material by the National Occupational Health and Safety Commission (WSA). Maintain exposure to a minimum. For oil mist, mineral: TLV TWA: 5mg/m3; STEL 10mg/m3
Engineering Controls	Maintain concentration below recommended exposure limit. If risk of overexposure exists, wear SAA approved respirator.
Respiratory Protection	Not normally required. If oil mist cannot be controlled, a respirator fitted with an organic vapour cartridge combined with a particulate pre-filter should be used.
Eye Protection	Wearing of the following personal protective equipment may be

	advisable. Safety glasses,goggles or faceshield as appropriate.
Hand Protection	PVC, neoprene or nitrile rubber gloves.
Personal Protective Equipment	Overalls, safety glasses and impervious gloves, eg. PVC. Avoid skin and eye contact, and inhalation of mists/aerosols. Wash contaminated clothing and protective equipment before storing/re-using. Avoid carrying contaminated rags in pockets or wearing of soaked clothing. If risk of inhalation of spray mist exists, wear combined organic vapour/particulate respirator meeting the requirements of AS1715 and AS1716. If using a respirator' ensure that the cartridges are correct for the potential air contamination and are in good working order.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form	Liquid.
Appearance	Clear Brown Liquid.
Odour	Mild
Melting Point	N/A
Boiling Point	> 300°C
Solubility in Water	Negligible.
Solubility in Organic Solvents	Soluble.
Specific Gravity	0.888 @ 15°C/typical
Vapour Pressure	< 0.1 mmHg @ 25°C
Physical State	Liquid.
Viscosity	Viscosity @40°C = 92.2 cSt Typical Viscosity @100°C = 11.4 cSt Typical
Volatile Component	None
Flash Point	210°C/typical
Flammability	Will burn if involved in a fire.
Flammable Limits - Lower	Not applicable

Flammable Limits - Upper	Not Applicible.
Explosion Properties	Not applicable
Other Information	

10. STABILITY AND REACTIVITY

Stability and Reactivity	Stable. (light, thermal)
Incompatible Materials	Strong oxidisers.
Hazardous Decomposition Products	Carbon monoxide, carbon dioxide, aldehydes, hydrogen sulfide, oxides of calcium, sulfur and zinc.
Hazardous Reactions	Store away from strong oxidizing or combustible materials.
Hazardous Polymerization	Will not occur.

11. TOXICOLOGICAL INFORMATION

Toxicology Information	This product is considered to be non-hazardous when used in accordance with good industrial hygiene and the manufacturers recommendations.
Inhalation	Not normally a hazard due to the non-volatile nature of the product. Inhalation of oil mist/vapour from heated material may cause irritation of upper respiratory system.
Ingestion	May cause mild irritation of mouth, throat, and stomach with nausea and mild diarrhoea. Aspiration (liquid into lungs) of vomited material may cause pneumonitis.
Skin	Contact with skin may result in irritation.
Eye	May cause slight eye irritation.
Chronic Effects	Repeated or prolonged skin contact can result in irritation and in

severe
cases dermatitis.
Product is not a carcinogen according to NTP, IARC, OSHA, ACGIH. .

12. ECOLOGICAL INFORMATION

Environment Protection

Non-biodegradable.
Avoid contaminating waterways.
* For mineral oil: Acute LC/EC50 Fish - Juvenile Rainbow Trout - Practically non-toxic. Based on testing with similar products.

13. DISPOSAL CONSIDERATIONS

Disposal Considerations

Product is suitable for burning in an enclosed, controlled burner for fuel value or disposal by supervised incineration. Such burning may be limited by the local authority. In addition, the product is suitable for processing by an approved recycling facility or can be disposed of at an appropriate licensed waste disposal site. Use of these methods is subject to user compliance with applicable laws and regulation and consideration of product characteristics at time of disposal.

14. TRANSPORT INFORMATION

Transport Information

Not classified as Dangerous Goods, according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.

Hazchem Code

N/A

Special Precautions for User

IMO: Not regulated by IMO.
ACTDG: Not regulated by ACTDG.
IATA: Not regulated by IATA.

Storage and Transport

Protect containers against physical damage and check regularly for leaks.
Do not store in open or unlabelled containers. Store away from oxidizing
agents or combustible material.

15. REGULATORY INFORMATION

Regulatory Information

NON-HAZARDOUS SUBSTANCE.
NOT SCHEDULED POISON.

Not Classified as Hazardous according to criteria of National Occupational Health & Safety Commission, Australia (NOHSC).
Not classified as a Scheduled Poison according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

Poisons Schedule Not Scheduled

Packaging & Labelling Not regulated

Other Information Australian classifications:
UN Number: N/A
HAZCHEM Code: N/A
Dangerous goods class: N/A
Packaging group: N/A
AS 1940 Class: C2
Poison schedule: N/A

16. OTHER INFORMATION

Contact Person/Point Laboratory Manager +61 (0)3 9300 6400
Research & Development Chemist +61 (0)3 9300 6400
New Zealand Office +64 9 828 3255

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 unauthorosed 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.

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

Literature References

Last Change Supersede issue: Sept 2010
Reason/s for re-issue: New product

User Information Issue Date: 21/09/10
Supercedes Issue Date: 20.05.2009
Reason(s) for issue: Formulation updated
Safety data sheets are updated frequently. Please ensure that you have a
current copy.
N\A = Not allocated.

End of MSDS

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