

## SAFETY DATA SHEET

acc.to ISO/DIS 11014 for USA

### 1 PRODUCT AND COMPANY IDENTIFICATION

#### 1.1 Product identifier

**Product name:** TS-D

**Other means of identification:** For further information, please refer to section 9 of the SDS.

#### 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 GERMANY GmbH

Friesenheimer Str. 19

68169 Mannheim

Telephone:

+49 621 3701-0 (ZENTRALE)

Fax:

+49 621 3701-570

##### US Distributor

Fuchs Lubricants Co.

17050 Lathrop Avenue

Harvey, IL 60426

#### Contact for request of safety data sheets

E-mail:

Automotive lubricants

CS.Services-FLG@fuchs.com

Industrial lubricants

Telephone:

+49 621 3701-0 (ZENTRALE)

#### Informing department for safety data sheets

E-mail:

produktsicherheit-FLG@fuchs.com

#### 1.4 US contact telephone :

708-333-8900

**Emergency telephone:**

800-255-3924

### 2 HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

**The product has been classified and labelled as hazardous according to the legislation in force.**

##### Physical Hazards

Flammable liquids

Category 3

##### Health Hazards

**Toxic to reproduction**

**Category 1B**

**Specific Target Organ Toxicity - Single Exposure**

**Category 3**

Product name: TS-D

Specific Target Organ Toxicity - Repeated Exposure Category 1

#### Hazard summary

##### Physical Hazards:

Can form flammable vapour-air mixtures during the application.

## 2.2 Label Elements



Signal Words: Danger

Hazard Statement(s):  
H226: Flammable liquid and vapor.  
H360D: May damage the unborn child.  
H336: May cause drowsiness or dizziness.  
H372: Causes damage to organs through prolonged or repeated exposure.

#### Precautionary Statements

Prevention:  
P202: Do not handle until all safety precautions have been read and understood.  
P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P260: Do not breathe dust/fume/gas/mist/vapors/spray.  
P281: Use personal protective equipment as required.

Response:  
P312: Call a POISON CENTER or doctor/ physician if you feel unwell.  
P308+P313: IF exposed or concerned: Get medical advice/attention.

Storage:  
P403+P233: Store in a well-ventilated place. Keep container tightly closed.  
P405: Store locked up.

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.

#### Unknown toxicity:

Due to information available product does not contain any ingredients of unknown toxicity.

## 3 COMPOSITION / INFORMATION ON INGREDIENTS

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**Product name:** TS-D

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**3.2 Mixtures****General information:** Mixture of the substances listed below with harmless additions.

Chemical name	Identifier	Concentration *	Notes
Acetic acid ester	108-65-6	50.00 - <100.00%	
pyrazole derivative	163206-31-3	5.00 - <10.00%	
1-Methoxy-2-propanol	107-98-2	1.00 - <5.00%	
Acetic acid ester	70657-70-4	0.10 - <0.30%	

\* 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.

**Classification**

Chemical name	Identifier	Classification
Acetic acid ester	108-65-6	Flam. Liq. 3;H226, STOT SE 3;H336
pyrazole derivative	163206-31-3	STOT RE 1;H372
1-Methoxy-2-propanol	107-98-2	Flam. Liq. 3;H226, STOT SE 3;H336
Acetic acid ester	70657-70-4	Flam. Liq. 3;H226, Repr. 1B;H360D, STOT SE 3;H335

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 Nota L/ Nota N of Annex VI of Regulation EC 1272/2008."

**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:** Get medical attention if symptoms occur. Take off immediately all contaminated clothing. Rinse skin with water [or shower]. Wash with water and soap; pay attention: skin degreasing product.**Ingestion:** Rinse mouth thoroughly.**4.2 Most important symptoms and effects, both acute and delayed:** Headache.**4.3 Indication of any immediate medical attention and special treatment needed** Get medical attention if symptoms occur.**SECTION 5: Firefighting measures**

Product name: TS-D

**General Fire Hazards:** Use water spray to keep fire-exposed containers cool. Water may be ineffective in fighting the fire. Fight fire from a protected location. Move containers from fire area if you can do so without risk.

## 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:** Avoid water in straight hose stream; will scatter and spread fire.

**5.2 Special hazards arising from the substance or mixture:** Can form explosive vapor-air mixtures at higher temperatures.

## 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:** Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. 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:** Ventilate closed spaces before entering them. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep upwind. In case of spills, beware of slippery floors and surfaces. Keep away from sources of ignition - No smoking.

**6.2 Environmental Precautions:** Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so. Prevent from spreading (e.g. by binding or oil barriers). Avoid release to the environment. 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.

Dike for later disposal. Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk.

Product name: TS-D

**SECTION 7: Handling and storage:****7.1 Precautions for safe handling:**

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground and bond container and receiving equipment. Take precautionary measures against static discharges. Use only in well-ventilated areas. Risk of vapor concentration on the floor and in low-lying areas. 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:**

Store in a well-ventilated place. Store in a cool place. Local regulations concerning handling and storage of waterpolluting products have to be followed. The precautions for storing and handling of flammable liquids have to be kept. Local regulations for common storage of flammable liquids have to be followed.

**7.3 Specific end use(s):**

Not applicable

**8 EXPOSURE CONTROLS / PERSONAL PROTECTION****8.1.Exposure Limits**

Chemical name	Type	Exposure Limit Values		Source
Titanium dioxide - Total dust.	PEL		15 mg/m <sup>3</sup>	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006)
Titanium dioxide - Total dust.	TWA		10 mg/m <sup>3</sup>	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)
Titanium dioxide	TWA		10 mg/m <sup>3</sup>	US. ACGIH Threshold Limit Values, as amended (02 2012)
1-Methoxy-2-propanol	TWA	100 ppm	360 mg/m <sup>3</sup>	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)
1-Methoxy-2-propanol	STEL	150 ppm	540 mg/m <sup>3</sup>	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)
1-Methoxy-2-propanol	TWA	50 ppm		US. ACGIH Threshold Limit Values, as amended (02 2013)
1-Methoxy-2-propanol	STEL	100 ppm		US. ACGIH Threshold Limit Values, as amended (02 2013)

**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**

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**Product name:** TS-D

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<b>General information:</b>	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.
<b>Eye/face protection:</b>	Avoid contact with skin and eyes. Goggles/face shield are recommended. If risk of splashing, wear safety goggles or face shield.
<b>Skin protection</b>	
<b>Hand Protection:</b>	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.
<b>Other:</b>	Do not carry cleaning cloths impregnated with the product in trouser pockets. Wear suitable protective clothing.
<b>Respiratory Protection:</b>	Ensure good ventilation/exhaustion at the workplace. Avoid breathing vapour/ aerosol.
<b>Thermal hazards:</b>	No data available.
<b>Hygiene measures:</b>	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.
<b>Environmental Controls:</b>	No data available.

<b>9 PHYSICAL AND CHEMICAL PROPERTIES</b>
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**9.1 Information on basic physical and chemical properties**

<b>Physical state:</b>	liquid
<b>Form:</b>	liquid
<b>Color:</b>	White
<b>Odor:</b>	No data available.
<b>Odor Threshold:</b>	Not applicable for mixtures
<b>pH:</b>	substance/mixture is non-soluble (in water)
<b>Freezing point:</b>	Not applicable for mixtures
<b>Boiling Point:</b>	Value not relevant for classification
<b>Flash Point:</b>	32 °C
<b>Evaporation Rate:</b>	Not applicable for mixtures
<b>Flammability (solid, gas):</b>	Value not relevant for classification
<b>Flammability Limit - Upper (%):</b>	Not applicable for mixtures

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**Product name:** TS-D

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<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>	0.98 g/cm <sup>3</sup> (20 °C)
<b>Solubility(ies)</b>	
<b>Solubility in Water:</b>	No data available.
<b>Solubility (other):</b>	No data available.
<b>Partition coefficient (n-octanol/water):</b>	Not applicable for mixtures
<b>Auto-ignition temperature:</b>	Value not relevant for classification
<b>Decomposition Temperature:</b>	Value not relevant for classification
<b>Flow time:</b>	Value not relevant for classification
<b>Explosive properties:</b>	Value not relevant for classification
<b>Oxidizing properties:</b>	Value not relevant for classification
<b>9.2 Other information</b>	No data available.

#### SECTION 10: Stability and reactivity

<b>10.1 Reactivity:</b>	Stable under normal use conditions.
<b>10.2 Chemical Stability:</b>	Material is stable under normal conditions.
<b>10.3 Possibility of hazardous reactions:</b>	Stable under normal use conditions.
<b>10.4 Conditions to avoid:</b>	Heat, sparks, flames.
<b>10.5 Incompatible Materials:</b>	Strong oxidizing substances. Strong acids. Strong bases.
<b>10.6 Hazardous Decomposition Products:</b>	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

#### 11 TOXICOLOGICAL INFORMATION

##### Information on likely routes of exposure

<b>Inhalation:</b>	No data available.
<b>Ingestion:</b>	No data available.
<b>Skin Contact:</b>	No data available.
<b>Eye contact:</b>	No data available.

##### Acute toxicity

##### Oral

##### Product:

Not classified for acute toxicity based on available data.

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**Product name:** TS-D

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**Specified substance(s)**

Acetic acid ester	LD 50 (Rat): 8,532 mg/kg
1-Methoxy-2-propanol	LD 50 (Rat): > 5,000 mg/kg

**Dermal****Product:**

ATEmix: 8,004 mg/kg

**Specified substance(s)**

Acetic acid ester	LD 50 (Rat): 5,000 mg/kg
1-Methoxy-2-propanol	LD 50 (Rabbit): 13,500 mg/kg

**Inhalation****Product:**

Not classified for acute toxicity based on available data.

**Specified substance(s)**

Acetic acid ester	LC 5035.7 mg/l
1-Methoxy-2-propanol	LC 50 (Rat, 4 h): > 6 mg/l

**Skin Corrosion/Irritation:****Product:**

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

**Serious Eye Damage/Eye Irritation:****Product:**

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

**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.

**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.

**IARC: IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:**

No carcinogenic components identified

**NTP: US. National Toxicology Program (NTP) Report on Carcinogens:**

No carcinogenic components identified

**OSHASp: US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):**

No carcinogenic components identified

**Reproductive toxicity****Product:**

Based on available data, the classification criteria are met.



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**Product name:** TS-D
 

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**Specific Target Organ Toxicity - Single Exposure**
**Product:** Based on available data, the classification criteria are met.
**Specific Target Organ Toxicity - Repeated Exposure**
**Product:** Based on available data, the classification criteria are met.
**Aspiration Hazard**
**Product:** Based on available data, the classification criteria are not met.

<b>12 ECOLOGICAL INFORMATION</b>
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**General information:** Not applicable Not applicable
**12.1 Toxicity****Acute toxicity**
**Product:** Based on available data, the classification criteria are not met.
**Fish****Specified substance(s)**

Acetic acid ester LC 50 (Fish, 96 h): &gt; 100 mg/l

1-Methoxy-2-propanol LC 50 (Fish, 96 h): &gt; 4,600 mg/l

**Aquatic Invertebrates****Specified substance(s)**

Acetic acid ester LC 50 (Water Flea, 48 h): &gt; 408 mg/l

1-Methoxy-2-propanol EC 50 (Water Flea, 48 h): &gt; 500 mg/l

**Chronic ToxicityProduct:** Based on available data, the classification criteria are not met.
**Toxicity to Aquatic Plants****Specified substance(s)**

Acetic acid ester EC 50 (Alga, 72 h): 1,000 mg/l

1-Methoxy-2-propanol EC 50 (Alga): &gt; 1,000 mg/l

**12.2 Persistence and Degradability****Biodegradation**
**Product:** Not applicable for mixtures
**Specified substance(s)**

Acetic acid ester 83 % (28 d, OECD 301F)

**12.3 Bioaccumulative potential**
**Product:** Not applicable for mixtures
**12.4 Mobility in soil:**
**Product:** Not applicable for mixtures
**12.5 Results of PBT and vPvB assessment:**

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

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**Product name:** TS-D

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**12.6 Other adverse effects:** No data available.**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.**14 TRANSPORT INFORMATION****DOT**

- 14.1 UN number or ID number: UN 1993  
14.2 Proper Shipping Name: Flammable liquids, n.o.s.(Acetic acid ester, 1-Methoxy-2-propanol, ethyl acetate)  
14.3 Transport Hazard Class(es): 3  
14.4 Subsidiary risk label: –  
14.5 Packing Group: III  
14.6 Label(s): 3  
14.7 Marine Pollutant: –

**IMDG - International Maritime Dangerous Goods Code**

- 14.1 UN number or ID number: UN 1993  
14.2 UN Proper Shipping Name: FLAMMABLE LIQUID, N.O.S.(Acetic acid ester, 1-Methoxy-2-propanol, ethyl acetate)  
14.3 Transport Hazard Class(es): 3  
14.4 Subsidiary risk label: –  
14.5 Packing Group: III  
14.6 Label(s): 3  
14.7 Marine Pollutant: –  
14.8 EmS No.: F-E; S-E

**IATA**

- 14.1 UN number or ID number: UN 1993  
14.2 Proper Shipping Name: Flammable liquid, n.o.s.(Acetic acid ester, 1-Methoxy-2-propanol, ethyl acetate)  
14.3 Transport Hazard Class(es): 3  
14.4 Subsidiary risk label: –  
14.5 Packing Group: III  
14.6 Label(s): 3  
14.7 Marine Pollutant: –

**15 REGULATORY INFORMATION****US Federal Regulations****US State Regulations****US. California Proposition 65**

WARNING! This product can expose you to chemicals including

TITANIUM DIOXIDE (AIRBORNE,	which is [are] known to the State of California to cause cancer.
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**Product name:** TS-D

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UNBOUND PARTICLES OF RESPIRABLE SIZE)	
1,4-DIOXANE	which is [are] known to the State of California to cause cancer.

For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

**Inventory Status**

NDSL	Not in compliance with the inventory.
TSCA	On or in compliance with the inventory
DSL	On or in compliance with the inventory

**16 OTHER INFORMATION**

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

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

H226	Flammable liquid and vapor.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H360D	May damage the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.

**Revision Date:** 05.10.2023

**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.