

SAFETY DATA SHEET

acc.to ISO/DIS 11014 for USA

1 PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifier

Product name: TS-J2

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.

US Distributor

1.3 Details of the supplier of the safety data sheet

Manufacturer / Supplier

FUCHS LUBRITECH GmbH
Werner-Heisenberg-Strasse 1
67661 Kaiserslautern

Fuchs Lubricants Co.

17050 Lathrop Avenue

Harvey, IL 60426

(708) 333-8900

(800) 255-3924 24 hrs

Emergency

Telephone:

+49 (0) 6301 3206-0

Fax:

+49 (0) 6301 3206-940

Contact Person:

FUCHS LUBRITECH GmbH - Product Safety Management

E-mail:

flt.reach@fuchs.com

Telephone:

+49 (0) 6301 3206-0

Fax:

+49 (0) 6301 3206-940

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

Hazard summary

Physical Hazards:

Can form flammable vapour-air mixtures during the application.

Product name: TS-J2

2.2 Label Elements



Signal Words: Warning

Hazard Statement(s): H226: Flammable liquid and vapor.

Precautionary Statements

Prevention: P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response: P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

Storage: P403: Store in a well-ventilated place.
P235: Keep cool.

Disposal: P501: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

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.

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

3 COMPOSITION / INFORMATION ON INGREDIENTS

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

Chemical name	Identifier	Concentration *	Notes
Titanium dioxide	13463-67-7	1.00 - <5.00%	
1-Methoxy-2-propanol	107-98-2	1.00 - <5.00%	
ethyl acetate	141-78-6	0.10 - <1.00%	
iso-butanol	78-83-1	0.10 - <1.00%	
Dioxane	123-91-1	0.00 - <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: TS-J2

Classification

Chemical name	Identifier	Classification
Titanium dioxide	13463-67-7	
1-Methoxy-2-propanol	107-98-2	Flam. Liq. 3;H226, STOT SE 3;H336
ethyl acetate	141-78-6	Flam. Liq. 2;H225, Eye Irrit. 2;H319, STOT SE 3;H336
iso-butanol	78-83-1	Flam. Liq. 3;H226, Skin Irrit. 2;H315, Eye Dam. 1;H318, STOT SE 3;H335, STOT SE 3;H336
Dioxane	123-91-1	Flam. Liq. 2;H225, Carc. 2;H351, Eye Irrit. 2;H319, 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 Note L 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

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: CO₂, 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.

Product name: TS-J2

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| 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

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| 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. |

SECTION 7: Handling and storage:

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| 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. |
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Product name: TS-J2

7.2 Conditions for safe storage, including any incompatibilities: Store in a well-ventilated place. Store in a cool place. 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 ³	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 ³	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)
Titanium dioxide	TWA		10 mg/m ³	US. ACGIH Threshold Limit Values, as amended (02 2012)
1-Methoxy-2-propanol	TWA	100 ppm	360 mg/m ³	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)
1-Methoxy-2-propanol	STEL	150 ppm	540 mg/m ³	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)
ethyl acetate	TWA	400 ppm		US. ACGIH Threshold Limit Values, as amended (02 2012)
iso-butanol	PEL	100 ppm	300 mg/m ³	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006)
iso-butanol	TWA	50 ppm	150 mg/m ³	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)
iso-butanol	TWA	50 ppm		US. ACGIH Threshold Limit Values, as amended (02 2012)
Dioxane	PEL	100 ppm	360 mg/m ³	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006)
Dioxane	TWA	25 ppm	90 mg/m ³	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)
Dioxane	TWA	20 ppm		US. ACGIH Threshold Limit Values, as amended (02 2012)

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

Product name: TS-J2

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:	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: ≥ 480 min Recommended thickness of the material: ≥ 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:	No data available.
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.

9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state:	liquid
Form:	liquid
Color:	Dark gray
Odor:	Characteristic
Odor Threshold:	Not applicable for mixtures
pH:	substance/mixture is non-soluble (in water)
Freezing point:	Not applicable for mixtures
Boiling Point:	Value not relevant for classification
Flash Point:	32 °C
Evaporation Rate:	Not applicable for mixtures
Flammability (solid, gas):	Value not relevant for classification
Flammability Limit - Upper (%)—:	Not applicable for mixtures

Product name: TS-J2

Flammability Limit - Lower (%)—:	Not applicable for mixtures
Vapor pressure:	Not applicable for mixtures
Relative vapor density:	Not applicable for mixtures
Density:	1.10 g/cm ³ (20 °C)
Solubility(ies)	
Solubility in Water:	No data available.
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	Not applicable for mixtures
Autoignition Temperature:	Value not relevant for classification
Decomposition Temperature:	Value not relevant for classification
Flow time:	Value not relevant for classification
Explosive properties:	Value not relevant for classification
Oxidizing properties:	Value not relevant for classification
9.2 Other information	No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity:	Stable under normal use conditions.
10.2 Chemical Stability:	Material is stable under normal conditions.
10.3 Possibility of hazardous reactions:	Stable under normal use conditions.
10.4 Conditions to avoid:	Heat, sparks, flames.
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.

11 TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation:	No data available.
Ingestion:	No data available.
Skin Contact:	No data available.
Eye contact:	No data available.

Acute toxicity

Oral

Product:

Not classified for acute toxicity based on available data.

Product name: TS-J2

Specified substance(s)

Titanium dioxide	LD 50 (Rat): > 10,000 mg/kg
1-Methoxy-2-propanol	LD 50 (Rat): > 5,000 mg/kg
ethyl acetate	LD 50 (Rat): 5,600 mg/kg
iso-butanol	LD 50 (Rat): 2,460 mg/kg
Dioxane	LD 50 (Rat): 4,200 mg/kg

Dermal

Product:

Not classified for acute toxicity based on available data.

Specified substance(s)

1-Methoxy-2-propanol	LD 50 (Rabbit): 13,500 mg/kg
ethyl acetate	LD 50 (Rabbit): 18,000 mg/kg
iso-butanol	LD 50 (Rabbit): 4,200 mg/kg
Dioxane	LD 50 (Rabbit): 7,600 mg/kg

Inhalation

Product:

Not classified for acute toxicity based on available data.

Specified substance(s)

1-Methoxy-2-propanol	LC 50 (Rat, 4 h): > 6 mg/l
ethyl acetate	LC 50 (Rat, 4 h): 1,600 mg/l
Dioxane	LC 50 (Rat, 4 h): 46 mg/l Vapour

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.

Specified substance(s)

ethyl acetate	No sensitizing effect (guinea pig); OECD 406
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Product name: TS-J2

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

OSHAS: 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 not met.

Specific Target Organ Toxicity - Single Exposure

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

Specified substance(s)

ethyl acetate Nervous System
May cause drowsiness or dizziness.

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.

12 ECOLOGICAL INFORMATION

12.1 Toxicity

Acute toxicity

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

Fish

Specified substance(s)

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

ethyl acetate LC 50 (Fish, 96 h): 230 mg/l

iso-butanol LC 50 (Fish, 96 h): 1,430 mg/l

Aquatic Invertebrates

Specified substance(s)

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

ethyl acetate EC 50 (Water Flea, 48 h): 717 mg/l

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

Product name: TS-J2

Aquatic Invertebrates

Specified substance(s)

iso-butanol NOEC (Water Flea, 21 d): 20 mg/l

Toxicity to Aquatic Plants

Specified substance(s)

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

iso-butanol EC 50 (Alga, 72 h): 1,799 mg/l (OECD 201)

12.2 Persistence and Degradability

Biodegradation

Product:

Not applicable for mixtures

Specified substance(s)

ethyl acetate 79 % (20 d, OECD 301D) Readily biodegradable

iso-butanol 70 - 80 % (28 d, OECD 301D) Readily biodegradable

12.3 Bioaccumulative potential

Product:

Not applicable for mixtures

Specified substance(s)

ethyl acetate Bioconcentration Factor (BCF): 30

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.

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.

Product name: TS-J2

14 TRANSPORT INFORMATION

DOT

- 14.1 UN 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

IMDG - International Maritime Dangerous Goods Code

- 14.1 UN 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: 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

15 REGULATORY INFORMATION

US Federal Regulations

US State Regulations

US. California Proposition 65

This product contains chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm.

Inventory Status

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

16 OTHER INFORMATION

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

Product name: TS-J2

Wording of the H-statements in section 2 and 3

H225	Highly flammable liquid and vapor.
H226	Flammable liquid and vapor.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.

Revision Date: 11.06.2021

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.