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1 Identification of the substance/mixture and of the company/undertaking

· Product identifier

· Trade name: FUCHS CHAINLUBE

· Article number: 800002518

- · Relevant identified uses of the substance or mixture and uses advised against
- · Sector of Use

SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites

SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

SU21 Consumer uses: Private households / general public / consumers

- · Application of the substance / the preparation Lubricant
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

FUCHS LUBRICANTS (UK) PLC.

New Century Street

Hanley

Stoke-on-Trent, Staffordshire, ST1 5HU

UK

e-mail: product.safety@fuchs-oil.com

- · Further information obtainable from: Product safety department.
- · Emergency telephone number:

01782 203700

Emergency telephone: (UK) 01782 203700

2 Hazards identification

- · Classification of the substance or mixture
- · Classification according to Directive 67/548/EEC or Directive 1999/45/EC



Xi; Irritant

R38: Irritating to skin.



F+; Extremely flammable

R12: Extremely flammable.

R52/53-67: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Vapours may cause drowsiness and dizziness.

· Information concerning particular hazards for human and environment:

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Warning! Pressurized container.

Has a narcotizing effect.

· Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

- · Label elements
- \cdot Labelling according to EU guidelines:

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

· Code letter and hazard designation of product:

Xi Irritant

F+ Extremely flammable

- · Risk phrases:
- 12 Extremely flammable.
- 38 Irritating to skin.
- 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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67 Vapours may cause drowsiness and dizziness.

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· Safety phrases:

- 2 Keep out of the reach of children.
- 16 Keep away from sources of ignition No smoking.
- 23 Do not breathe spray.
- 24 Avoid contact with skin.
- 29/56 Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.
- 51 Use only in well-ventilated areas.

\cdot Special labelling of certain preparations:

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

Do not spray on a naked flame or any incandescent material.

- · Classification in accordance with Directive 75/324/EEC: Extremely flammable
- · Other hazards
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · **vPvB:** Not applicable.

3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · **Description:** Mixture of substances listed below with nonhazardous additions.

· Dangerous compon	ents:	
CAS: 64742-49-0 EINECS: 265-151-9	Petroleum distillate Xn R65; Xi R38; F R11; N R51/53 R67 Flam. Liq. 2, H225; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; Skin Irrit. 2, H315	2.5-10%
CAS: 92045-53-9 EINECS: 295-434-2	Naphtha (petroleum), hydrodesulfurized light dearomatized Xn R65; Xi R38; F R11; N R51/53 R67 ♦ Flam. Liq. 1, H224; ♦ Muta. 1B, H340; Carc. 1B, H350; Asp. Tox. 1, H304	2.5-10%
CAS: 106-97-8 EINECS: 203-448-7	Butane F+ R12 Flam. Gas 1, H220; Press. Gas, H280	2.5-10%
CAS: 75-28-5 EINECS: 200-857-2	Isobutane ► F+ R12 ◆ Flam. Gas 1, H220; Press. Gas, H280	1-2.5%
CAS: 68649-42-3 EINECS: 272-028-3	Zinc alkyldithiophosphate Xi R38-41; N R51/53 Eye Dam. 1, H318; Aquatic Chronic 2, H411; Skin Irrit. 2, H315	0.25-1%
CAS: 64742-94-5 EINECS: 265-198-5	Solvent naphtha (petroleum), heavy arom. Xn R65; N R51/53 R66-67 Flam. Liq. 3, H226; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; Eye Irrit. 2, H319	<0.25%

Additional information:

Annex I Nota L applies to the base oil(s) in this product. Nota L - The classification as a carcinogen need not apply if it can be shown that the substance contains less than 3 % DMSO extract as measured by IP 346. For the wording of the listed risk phrases refer to section 16.

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4 First aid measures

- · Description of first aid measures
- · After inhalation:

Supply fresh air; consult doctor in case of complaints.

In case of unconsciousness place patient stably in side position for transportation.

· After skin contact:

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

· After eye contact:

Check for and remove any contact lenses.

Rinse opened eye for several minutes under running water.

- · After swallowing: Do not induce vomiting; call for medical help immediately.
- · Information for doctor:

Contains petroleum distillates.

Refer to section 11.

- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Firefighting measures

- · Extinguishing media
- · Suitable extinguishing agents:

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Use fire extinguishing methods suitable to surrounding conditions.

- · For safety reasons unsuitable extinguishing agents: Water with full jet
- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment:

Wear fully protective suit.

Wear self-contained respiratory protective device.

· Additional information Cool endangered receptacles with water spray.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Keep away from ignition sources.

Keep ignition sources away - no smoking.

Wear protective equipment. Keep unprotected persons away.

· Environmental precautions:

Do not allow to penetrate the ground/soil.

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

· Methods and material for containment and cleaning up:

Send for recovery or disposal in suitable receptacles.

Ensure adequate ventilation.

· Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

CD.

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7 Handling and storage

- · Handling:
- · Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

· Information about fire - and explosion protection:

Do not spray onto a naked flame or any incandescent material.

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C, i.e. electric lights. Do not pierce or burn, even after use.

- · Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles:

Store in a cool location.

Observe official regulations on storing packagings with pressurized containers.

- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions:

Keep container tightly sealed.

Do not seal receptacle gas tight.

Store in cool, dry conditions in well sealed receptacles.

Protect from heat and direct sunlight.

· Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · Additional information about design of technical facilities: No further data; see item 7.
- · Control parameters
- · Ingredients with limit values that require monitoring at the workplace:

106-97-8 Butane

WEL Short-term value: 1810 mg/m³, 750 ppm Long-term value: 1450 mg/m³, 600 ppm Carc (if more than 0.1% of buta-1.3-diene)

- · Additional information: The lists valid during the making were used as basis.
- · Exposure controls
- · Personal protective equipment:

Select PPE appropriate for the operations taking place taking into account the product properties.

· General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

Do not eat, drink, smoke or sniff while working.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

- Respiratory protection: Use suitable respiratory protective device in case of insufficient ventilation.
- · Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

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Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· For the permanent contact gloves made of the following materials are suitable:

Nitrile rubber, NBR

PVA gloves

Fluorocarbon rubber (Viton)

· Eye protection:



Tightly sealed goggles

· Body protection: Impervious protective clothing

9 Physical and chemical propert	9 Physical and chemical properties			
· Information on basic physical and cl · General Information	hemical properties			
· Appearance:				
Form:	Aerosol			
Colour:	Light yellow			
· Odour:	Characteristic			
· Odour threshold:	Not determined.			
· pH-value:	Not determined.			
· Change in condition				
Melting point/Melting range:	Undetermined.			
Boiling point/Boiling range:	-44°C			
· Flash point:	-97°C			
· Flammability (solid, gaseous):	Not applicable.			
· Ignition temperature:	365°C			
· Decomposition temperature:	Not determined.			
· Self-igniting:	Product is not selfigniting.			
· Danger of explosion:	Not determined.			
· Explosion limits:				
Lower:	1.8 Vol %			
Upper:	9.5 Vol %			
· Vapour pressure:	Not determined.			
· Density:	Not determined.			
· Relative density	Not determined.			
· Vapour density	Not determined.			
· Evaporation rate	Not applicable.			

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· Solubility in / Miscibility with

water: Not miscible or difficult to mix.

· Segregation coefficient (n-octanol/water): Not determined.

· Viscosity:

Dynamic: Not determined. **Kinematic:** Not determined.

· Solvent content:

 Organic solvents:
 27.5 %

 VOC (EC)
 27.50 %

• Other information No further relevant information available.

10 Stability and reactivity

- · Reactivity
- · Chemical stability
- · Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: Strong oxidising agents.
- · Hazardous decomposition products: Carbon monoxide and carbon dioxide

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- Primary irritant effect:
- · on the skin: Irritant to skin and mucous membranes.
- · on the eye: No irritating effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

In addition to local irritant manifestations, there is a narcotic effect when inhaling high concentrations, with the danger of central respiratory arrest.

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Irritant

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability Inherently biodegradable
- · Behaviour in environmental systems:
- · Bioaccumulative potential Product is not expected to bioaccumulate.
- · Mobility in soil No further relevant information available.
- · Ecotoxical effects:
- · Remark: Harmful to fish
- · Additional ecological information:
- · General notes:

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

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Safety Data Sheet According to 1907/2006 EC - 453/2010 EC

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Harmful to aquatic organisms

- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- $\cdot \ Waste \ treatment \ methods$
- · Recommendation

Contact waste processors for recycling information.

Must not be disposed together with household garbage. Do not allow product to reach sewage system. Used, degraded or contaminated product may be classified as hazardous waste. Anyone classifying hazardous waste and determining its fate must be qualified in accordance with state and international legislation.

· European waste catalogue

16 05 04* gases in pressure containers (including halons) containing dangerous substances

- · Uncleaned packaging:
- · Recommendation: Container remains hazardous when empty. Continue to observe all precautions.

Transport information	
· UN-Number · ADR, IMDG, IATA	UN1950
· UN proper shipping name	
· ADR	1950 AEROSOLS
· IMDG	AEROSOLS
· IATA	AEROSOLS, flammable
· Transport hazard class(es)	
· ADR	
· Class	2 5F Gases.
· Label	2.1
· IMDG, IATA	
· Class	2.1
· Label	2.1
· Packing group · ADR, IMDG, IATA	Void
· Environmental hazards: · Marine pollutant:	No
· Special precautions for user	Warning: Gases.
· Danger code (Kemler):	-

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• EMS Number: F-D,S-U

• Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable to packaged goods.

• Transport/Additional information:

• ADR

• Tunnel restriction code D

Tunnel restriction code: (D)

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · National regulations:

Class	Share in %
NK	27.5

- · Other regulations, limitations and prohibitive regulations
- · Substances of very high concern (SVHC) according to REACH, Article 57 None
- · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases

- The Hazard / Risk phrases shown below are for those component substances which are listed in section 3 and not for the actual finished formulation.
- Hazards are concentration dependent. Therefore for the hazard classification and risk/safety phrases appropriate for the actual finished formulated product refer to section 2.
- H220 Extremely flammable gas.
- H224 Extremely flammable liquid and vapour.
- H225 Highly flammable liquid and vapour.
- H226 Flammable liquid and vapour.
- H280 Contains gas under pressure; may explode if heated.
- H304 May be fatal if swallowed and enters airways.
- H315 Causes skin irritation.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H340 May cause genetic defects.
- H350 May cause cancer.
- H411 Toxic to aquatic life with long lasting effects.
- R11 Highly flammable.
- R12 Extremely flammable.
- R38 Irritating to skin.
- R41 Risk of serious damage to eyes.
- R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R65 Harmful: may cause lung damage if swallowed.
- R66 Repeated exposure may cause skin dryness or cracking.
- R67 Vapours may cause drowsiness and dizziness.
- · Department issuing MSDS: Product safety department.
- · Contact: STEVEN PRITCHARD