SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006 (REACH) Article 31, Annex II as amended.

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

1.1 Product identifier

Product name: SILKOLENE BRAKE/CHAIN CLEANER 500MAAER c

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Cleaner/degreaser
Uses advised against: No uses advised against identified.

1.3 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
Telephone:	+44 (0) 1782 203700
Contact Person:	Product Safety department
Telephone:	+44 (0) 1782 203700
E-mail:	product.safety@fuchs-oil.com

1.4 Emergency telephone number: UK NHS: Dial 111. Ireland NPIS: Dial +353 1 8092566.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

The product has been classified and labelled as hazardous according to regulation (EU) 1272/2008 (CLP).

Classification according to Regulation (EC) No 1272/2008 as amended.

Physical Hazards

Flammable aerosol	Category 1	H222: Extremely flammable aerosol. H229: Pressurized container: May burst if heated.

Health Hazards

Skin irritation	Category 2	H315: Causes skin irritation.
Serious eye irritation	Category 2	H319: Causes serious eye irritation.
Specific Target Organ Toxicity - Single Exposure	Category 3	H336: May cause drowsiness or dizziness.
Aspiration Hazard	Category 1	H304: May be fatal if swallowed and enters airways.

Environmental Hazards

Chronic hazards to the aquatic environment	Category 3	H412: Harmful to aquatic life with long lasting effects.

Hazard summary

Physical Hazards: Flammable aerosol.

Health Hazards

Inhalation: Has a narcotic effect.

Ingestion: If ingested, material may be aspirated into the lungs and cause chemical pneumonitis. Treat appropriately.

2.2 Label Elements

Contains:
Isopropyl alcohol
Acetone
Hydrocarbons, low viscosity

Signal Words: Danger

Hazard Statement(s):
H222: Extremely flammable aerosol.
H229: Pressurized container: May burst if heated.
H315: Causes skin irritation.
H319: Causes serious eye irritation.
H336: May cause drowsiness or dizziness.
H412: Harmful to aquatic life with long lasting effects.

Precautionary Statements

General information: P102: Keep out of reach of children.

Prevention: P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211: Do not spray on an open flame or other ignition source.
P251: Do not pierce or burn, even after use.
P261: Avoid breathing dust/fume/gas/mist/vapors/spray.
P262: Do not get in eyes, on skin, or on clothing.
P273: Avoid release to the environment.

Storage: P410+P412: Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

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.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

General information: Mixture of components with propellant in aerosol can.

Chemical name	Identifier	Concentration *	REACH Registration No.	Notes
Butane	EINECS: 203-448-7	0,00 - <100,00%	01-2119474691-32	
Propane	EINECS: 200-827-9	0,00 - <100,00%	01-2119486944-21	
Isobutane (<0,1% 1,3-butadiene)	EINECS: 200-857-2	0,00 - <100,00%	01-2119485395-27	
Isopropyl alcohol	EINECS: 200-661-7	20,00 - <50,00%	01-2119457558-25	
Acetone	EINECS: 200-662-2	20,00 - <50,00%	01-2119471330-49	
Hydrocarbons, low viscosity	EINECS: 265-151-9	10,00 - <25,00%	01-2119475514-35	

* 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	
Butane	EINECS: 203-448-7	CLP:	Flam. Gas 1;H220, Press. Gas H280
Propane	EINECS: 200-827-9	CLP:	Flam. Gas 1;H220, Press. Gas H280
Isobutane (<0,1% 1,3-butadiene)	EINECS: 200-857-2	CLP:	Flam. Gas 1;H220, Press. Gas Liq. Gas;H280
Isopropyl alcohol	EINECS: 200-661-7	CLP:	Flam. Liq. 2;H225, Eye Irrit. 2;H319, STOT SE 3;H336
Acetone	EINECS: 200-662-2	CLP:	Flam. Liq. 2;H225, Eye Irrit. 2;H319, STOT SE 3;H336
Hydrocarbons, low viscosity	EINECS: 265-151-9	CLP:	Flam. Liq. 2;H225, Asp. Tox. 1;H304, Skin Irrit. 2;H315, STOT SE 3;H336, Aquatic Chronic 2;H411

CLP: Regulation No. 1272/2008.

For the wording of the listed hazard statements refer to section 16.

SECTION 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: Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention.

Skin Contact: Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash contaminated clothing before reuse. Get medical attention.

Ingestion: Call a physician or poison control center immediately. Rinse mouth. Never give liquid to an unconscious person. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Do NOT induce vomiting. Call a POISON CENTRE/doctor/ if you feel unwell.

4.2 Most important symptoms and effects, both acute and delayed: Causes serious eye irritation. Causes skin irritation. If ingested, material may be aspirated into the lungs and cause chemical pneumonitis. Treat appropriately. Dizziness Freeze burns

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. 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:	Water with a full water jet.
5.2 Special hazards arising from the substance or mixture:	Danger of explosion with aerosol cans.

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 inaccordance 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.

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. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away.
6.2 Environmental Precautions:	Avoid release to the environment. Prevent further leakage or spillage if safe to do so.
6.3 Methods and material for containment and cleaning up:	Scrape up spillage or absorb with absorbing material. Stop the flow of material, if this is without risk. Dispose of the material collected according to regulations.
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. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you can do so without risk.

SECTION 7: Handling and storage:

7.1 Precautions for safe handling:

Avoid contact with eyes. Wash hands thoroughly after handling. Do not eat, drink or smoke when working with the product. Take usual precautions when handling mineral oil products or chemical products. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Avoid contact with skin. Avoid contact with flame and heat source, prevent contact with direct sunlight Use only in well-ventilated areas.

7.2 Conditions for safe storage, including any incompatibilities:

Store locked up. Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Local regulations concerning handling and storage of waterpolluting products have to be followed. Local regulations for the storage and handling of aerosol cans and flammable liquids have to be kept. Keep away from heat/sparks/hot surfaces. - No smoking.

7.3 Specific end use(s):

not applicable

Storage Class:

2 B, Aerosols

SECTION 8: Exposure controls/personal protection

8.1 Control Parameters

Occupational Exposure Limits

Chemical name	Type	Exposure Limit Values	Source
Butane	TWA	600 ppm 1.450 mg/m3	UK. EH40 Workplace Exposure Limits (WELs) (12 2011)
Butane	STEL	750 ppm 1.810 mg/m3	UK. EH40 Workplace Exposure Limits (WELs) (12 2011)
Isopropyl alcohol	TWA	400 ppm 999 mg/m3	UK. EH40 Workplace Exposure Limits (WELs) (12 2011)
Isopropyl alcohol	STEL	500 ppm 1.250 mg/m3	UK. EH40 Workplace Exposure Limits (WELs) (12 2011)
Acetone	TWA	500 ppm 1.210 mg/m3	UK. EH40 Workplace Exposure Limits (WELs) (12 2011)
Acetone	STEL	1.500 ppm 3.620 mg/m3	UK. EH40 Workplace Exposure Limits (WELs) (12 2011)

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

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 inhandling the chemicals or the mineral oil products.
Eye/face protection:	Safety glasses (EN 166) recommended during refilling. Avoid contact with eyes.
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:	Not known.
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.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	
Physical state:	Aerosols
Form:	Aerosols
Color:	Colorless
Odor:	Characteristic
Odor Threshold:	Not applicable for mixtures
pH:	not applicable
Freezing point:	Not applicable for mixtures
Boiling Point:	Value not relevant for classification
Flash Point:	Value not relevant for classification
Evaporation Rate:	Not applicable for mixtures
Flammability (solid, gas):	Value not relevant for classification
Flammability Limit - Upper (%)–:	Not applicable for mixtures

Flammability Limit - Lower (%)–:	Not applicable for mixtures
Vapor pressure:	Not applicable for mixtures
Vapor density (air=1):	Not applicable for mixtures
Density:	No data available.
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:	Stable under normal use conditions.
10.3 Possibility of hazardous reactions:	Stable under normal use conditions.
10.4 Conditions to avoid:	Stable under normal use conditions.
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.

SECTION 11: Toxicological information

Information on likely routes of exposure

Inhalation:	No data available.
Ingestion:	No data available.
Skin Contact:	Causes skin irritation.
Eye contact:	Causes eye irritation.

11.1 Information on toxicological effects

Acute toxicity

Oral

Product:

Not classified for acute toxicity based on available data.

Specified substance(s)

Isopropyl alcohol	LD 50 (Rat): 4.570 mg/kg
Acetone	LD 50 (Rat): 5.800 mg/kg (OECD 401)

Dermal

Product:

Not classified for acute toxicity based on available data.

Specified substance(s)

Isopropyl alcohol	LD 50 (Rabbit): 13.400 mg/kg
Acetone	LD 50 (Rabbit): > 15.800 mg/kg

Inhalation

Product:

Not classified for acute toxicity based on available data.

Specified substance(s)

Butane	LC 50 (Rat, 4 h): 658 mg/l Gas
Isopropyl alcohol	LC 50 (Rat, 4 h): 30 mg/l
Acetone	LC 50 (Rat, 4 h): 76 mg/l

Skin Corrosion/Irritation:

Product: Based on available data, the classification criteria are met.

Specified substance(s)

Acetone

Prolonged skin contact may cause redness, irritation and dry skin.

Hydrocarbons, low viscosity: Irritating to skin.

Serious Eye Damage/Eye Irritation:

Product: Based on available data, the classification criteria are met.

Specified substance(s)

Acetone: OECD 405 (Rabbit):
Causes serious eye irritation.

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)

Acetone

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

Germ Cell Mutagenicity

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

In vitro

Specified substance(s)

Acetone

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

In vivo

Specified substance(s)

Acetone

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

Carcinogenicity

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

Specified substance(s)

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

Reproductive toxicity

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

Specified substance(s)

Acetone — 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 met.

Specified substance(s)

Acetone

May cause drowsiness or dizziness.

Specific Target Organ Toxicity - Repeated Exposure

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

Specified substance(s)

Acetone

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

Aspiration Hazard

Product: May be fatal if swallowed and enters airways.

Other adverse effects: No data available.

SECTION 12: Ecological information

12.1 Toxicity

Acute toxicity

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

Fish

Specified substance(s)

Isobutane (<0,1% 1,3-butadiene)	LC 50 (Fish, 96 h): 28 mg/l
Isopropyl alcohol	LC 50 (Fish, 96 h): 9.640 mg/l
Acetone	LC 50 (Fish, 96 h): 5.540 mg/l

Aquatic Invertebrates
Specified substance(s)

Isobutane (<0,1% 1,3-butadiene)	EC 50 (Water Flea, 48 h): 16,3 mg/l
Acetone	EC 50 (Water Flea, 48 h): 8.800 mg/l

Chronic ToxicityProduct: Based on available data, the classification criteria are met.

Toxicity to Aquatic Plants
Specified substance(s)

Isobutane (<0,1% 1,3-butadiene)	EC 50 (Alga, 72 h): 8,6 mg/l

12.2 Persistence and Degradability

Biodegradation
Product: Not applicable for mixtures
Specified substance(s)
Acetone: The product is easily biodegradable.

12.3 Bioaccumulative potential

Product: Not applicable for mixtures
Specified substance(s)
Acetone: Bioconcentration Factor (BCF): 0,69 The product is not bioaccumulating.

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:

Harmful to aquatic life with long lasting effects.

Water Hazard Class (WGK): WGK 1: slightly water-endangering.

SECTION 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.

European Waste Codes

16 05 04*: Gases in pressure containers (including halons) containing dangerous substances.

SECTION 14: Transport information

ADR/RID

14.1 UN Number:	UN 1950
14.2 UN Proper Shipping Name:	AEROSOLS
14.3 Transport Hazard Class(es)	
Class:	2
Label(s):	2.1
Hazard No. (ADR):	–
Tunnel restriction code:	(D)
14.4 Packing Group:	–
14.5 Environmental hazards:	–
14.6 Special precautions for user:	–

ADN

14.1 UN Number:	UN 1950
14.2 UN Proper Shipping Name:	AEROSOLS
14.3 Transport Hazard Class(es)	
Class:	2
Label(s):	2.1
14.3 Packing Group:	–
14.5 Environmental hazards:	–
14.6 Special precautions for user:	–

IMDG

14.1 UN Number:	UN 1950
14.2 UN Proper Shipping Name:	AEROSOLS
14.3 Transport Hazard Class(es)	
Class:	2.1
Label(s):	2.1
EmS No.:	F-D, S-U
14.3 Packing Group:	–
14.5 Environmental hazards:	–
14.6 Special precautions for user:	–

IATA

14.1 UN Number:	UN 1950
14.2 Proper Shipping Name:	Aerosols, flammable
14.3 Transport Hazard Class(es):	
Class:	2.1
Label(s):	2.1
14.4 Packing Group:	–
14.5 Environmental hazards:	–
14.6 Special precautions for user:	–

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code: not applicable.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

EU Regulations

Regulation (EC) No. 2037/2000 Substances that deplete the ozone layer: none

Regulation (EC) No. 850/2004 on persistent organic pollutants: none

15.2 Chemical safety assessment: No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

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

Wording of the H-statements in section 2 and 3

H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H225	Highly flammable liquid and vapor.
H229	Pressurized container: May burst if heated.
H280	Contains gas under pressure; may explode if heated.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Other information: The classification is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies. The classification results from the Conventional Method mentioned in regulation EU 1272/2008 (CLP).

Revision Date: 08.06.2017

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.