SAFETY DATA SHEET
IN ACCORDANCE WITH REGULATION (EC) 1907/2006 (REACH)
Chain lubricant

Preparing date: 26 April 2024 **Version: 1**

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

1.1 Product identifier: Chain lubricant

UFI: 5HW5-YRKH-SSKN-YSYD

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

Identified uses: Maintenance.
For consumer, industrial and professional use.

Uses advised against: Other than above.

1.3 Details of the supplier of the safety data sheet:

Distributor:
SZAKAL MET-AL Zrt
2040 Budaörs, Kamaraerdei u 9/C.
Tel.: +36 23 431-000
HUNGARY

Email address for a competent person responsible for the safety data sheet: kozpont@szakalmetal.hu

1.4 Emergency telephone number:
Health Toxicological Information Service, Hungary:
06 1 476 6464 (available day and night)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture:
in accordance with Regulation (EC) No 1272/2008 (CLP)

Aerosols, Category 1	H222 Extremely flammable aerosol H229 Pressurised container: May burst if heated.

2.2 Label elements:

Composition: 50-70% propellant gas (propane, butane, isobutane)

Danger

Hazard Statement(s):
H222 Extremely flammable aerosol
H229 Pressurised container: May burst if heated.

Precautionary Statement(s):
P102 Keep out of reach of children.
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/vapours/spray.
P271 Use only outdoors or in a well-ventilated area.
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
P501 Dispose of contents/container to: As hazardous waste in accordance with local/regional/national/international regulation.

Remarks:
When packaging/labelling an aerosol product, the provisions of Regulation 34/2014. (X. 30.) NGM (on the requirements for the distribution of aerosol products and aerosol packaging) must also be followed.

2.3 Other hazards:

Data on the mineral oil component:
Inhalation of vapours in higher concentrations may irritate the respiratory tract. If swallowed, it can cause gastrointestinal irritation, vomiting and diarrhea.
High pressure subcutaneous injection can have serious consequences even in the absence of symptoms. Mineral oil can create a film on the surface of the water, thereby preventing oxygen exchange.
PBT, vPvB assessment: The product does not contain PBT or vPvB substances.

SECTION 3: Composition/information on ingredients

3.2 Mixtures:

Identifier	CAS Number	EC Number	Index Number/ REACH Registration Number	Concentration by weight	Classification in accordance with Regulation (EC) No 1272/2008
Propane	74-98-6	200-827-9	601-003-00-5/ 01-2119486944-21	50-70 %	Flam. Gas 1 H220 Press. Gas
Butane	106-97-8	203-448-7	601-004-00-0/ 01-2119474691-32		Flam. Gas 1 H220 Press. Gas
Isobutane	75-28-5	200-857-2	601-004-00-0/ 01-2119485395-27		Flam. Gas 1 H220 Press. Gas

The mineral oils in the product contains less than 3 % DMSO extract as measured by IP 346 'Determination of polycyclic aromatics in unused lubricating base oils and asphaltene free petroleum fractions — Dimethyl sulphoxide extraction refractive index method', Institute of Petroleum, London (according to note L of Regulation (EC) No. 1272/2008).

For the full text of H-sentences mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures:

General measures: fresh air is required. In case of symptoms, complaints or doubts, consult a doctor immediately. In case of unwellness, seek medical attention.
Never give anything by mouth to an unconscious casualty.
Inhalation:
The injured person should be taken to fresh air and placed in a resting position so that they can breathe easily. In case of coughing, difficulty breathing, or feeling unwell, call a doctor immediately.
Skin contact:
Take off the contaminated clothing and wash the contaminated skin surface with plenty of water and soap. In case of complaints or irritation, consult a doctor.
Eye contact:
Rinse the eyes - for at least 10-15 minutes - with plenty of running water, pulling the eyelids apart and moving the eyeball at the same time. Remove the contact lens, if present, and if it can be easily solved. Continue rinsing.
Consult a doctor in case of complaints or irritation.
Ingestion:
Unlikely route of exposure (aerosol product). In case of accidental ingestion or ingestion of the aerosol, do not induce vomiting. Propellant gas in higher concentrations can cause suffocation and lack of oxygen.

4.2 Most important symptoms and effects, both acute and delayed:

Data on the mineral oil component:
Inhalation of higher concentrations of vapours may irritate the respiratory tract. If swallowed, it can cause gastrointestinal irritation, vomiting and diarrhea.
High pressure subcutaneous injection can have serious consequences even in the absence of symptoms.
Propellant gas in higher concentrations can cause suffocation and lack of oxygen.

4.3 Indication of any immediate medical attention and special treatment needed:

Show the safety data sheet/label to the doctor.

SECTION 5: Firefighting measures

5.1 Extinguishing media:

Suitable extinguishing media: carbon dioxide, alcohol-resistant extinguishing foam, water spray.
Inappropriate extinguishing media: strong water jet. We can use water to cool the tanks.

5.2 Special hazards arising from the substance or mixture:

Extremely flammable aerosol. There is overpressure in the vessel: it may crack due to heat. Heating closed, pressurized containers is explosive.
In the event of a fire, smoke and other combustion products (carbon monoxide, carbon dioxide, hydrocarbons) may be produced, and inhalation of these can seriously harm health.
Gas-air mixtures can be explosive.
Due to the aerosol form of the product, large-scale emissions are unlikely.

5.3 Advice for firefighters:

Complete protective clothing in accordance with the regulations and a breathing apparatus independent of external air must be used. The resulting combustion products must not be inhaled. The leak must be stopped. Prevent the extinguishing water from entering sewers, living water, and the environment.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

Only designated, trained, emergency care personnel participating in the rescue should stay in the endangered area, remove unauthorized persons.
Remove all ignition sources and open flames.
The leak must be stopped if it is safe to do so.
There should be no open flames, sources of ignition or sparks in the air space.
Only non-sparking devices may be used.
Follow the hygiene and safety regulations.
Prevent the product from coming into contact with the skin and eyes.
Individual protection is required for those participating in the exemption.
Take care of the ventilation of the endangered room.

6.2 Environmental precautions:

The product that has reached the environment and the generated waste must be treated in accordance with the applicable environmental regulations. The product and waste from it must be prevented from entering living water, soil and public sewers. If an event involving environmental pollution has occurred, the competent authority must be notified immediately. The product may present an explosion hazard if it enters the sewage network. A large amount is unlikely to escape (aerosol bottle).

6.3 Methods and material for containment and cleaning up:

Stop the leak if it is safe to do so. Do not inhale the spray. The endangered area must be closed, unauthorized persons are prohibited from entering.
The spilled material must be picked up with a non-combustible absorbent material (e.g. dry earth, sand) and placed in a closed container until transport.

6.4 Reference to other sections:

Safe handling: see Section 7.
Individual protection measures, such as personal protective equipment: see Section 8.
Waste treatment, disposal: see Section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling:

It can be used outdoors or in a well-ventilated room.
Keep away from ignition sources, smoking is prohibited.
The prescribed safety and hygiene measures must be observed.

Do not eat or drink during use.
Personal protection must be used. Contaminated clothing must be removed and cleaned before reuse. Hand washing with soap and running water is required during work breaks and after work.
Fire and explosion protection: Extremely flammable aerosol.
There is overpressure in the vessel: it may crack due to heat.
Keep away from heat, hot surfaces, sparks, open flames and other sources of ignition. No smoking.
Do not spray on an open flame or other ignition source.
Take precautions against electrostatic charging.
Use only non-sparking devices.
Product vapours are heavier than air and may spread at ground level. Vapours can form explosive gas/air mixture.
Do not pierce or throw into fire, even after use.

7.2 Conditions for safe storage, including any incompatibilities:
Store in a well-ventilated, dry and cool place at a temperature below 35 °C.
Do not expose to heat exceeding 50 °C.
The containers may crack when heated (danger of explosion).
Smoking is prohibited in the storage room!
Take precautions against electrostatic charging.
Do not expose to sunlight or radiant heat. Do not pierce or throw into fire, even after use.
Follow the precautions for pressurized containers.
Do not store together with strong oxidizing agents and flammable substances.
Keep away from food, drink and animal feed.
Keep away from children.
Incompatible materials: see Section 10.5.
Type of material used for packaging/storage: no special requirements.

7.3 Specific end use(s): Maintenance. For consumer, industrial and professional use.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters:
The permitted average concentrations and permitted peak concentrations of dangerous substances in the air at the workplace and their characteristic properties according to Decree No. 5/2020 (II. 6.) ITM on the Protection of the Health and Safety of Workers from the Risks Related to Chemical Pathological Factors (Hungary):

Substance	CAS Number	ÁK-value mg/m^3	CK-value mg/m^3	Characteristics	Reference	ÁK correction group
n-BUTANE	106-97-8	2350	9400	-	-	N

N Irritants, simple asphyxiants, low health hazards. Correction is NOT necessary.
ÁK-value Permitted average concentration.
CK-value Permitted peak concentration.
DNEL values: No data available.

DNEL values, PNEC values: no data.

8.2 Exposure controls:

Pursuant to Section 11 (2) of the Regulation 5/2020. (II. 6.) ITM, in the case of a hazardous substance not regulated by a limit value, the employer is obliged to reduce the level of exposure to the lowest level expected according to scientific and technical standards, at which level, according to the current state of science, the hazardous substance has no health-damaging effect.

Adequate care must be taken during the work to avoid getting the mixture on the floor, clothing, skin, or eyes.

The product is only used with adequate ventilation.

Follow the general regulations for the handling of chemical substances.

Follow the precautions for pressurized containers.

Follow the industrial safety and basic hygiene rules.

Do not eat or drink while using the product.

No smoking!

Prevent the product from coming into contact with the skin and eyes.

Do not inhale the spray.

Remove contaminated clothing and wash it before reuse.

Wash your hands with soap and running water before breaks and meals and after working hours.

See Sections 6-7 as well.

Individual protection measures, such as personal protective equipment:

Individual protection should be selected based on the specific exposure, according to the data of the risk assessment.

Eye/face protection:

Safety glasses or face shields with closely fitting side shields must be used according to the regulations (EN 166).

Hand protection:

Use protective gloves that comply with the regulations (EN 374). Suitable glove material: Nitrile rubber.

The protective gloves must be impermeable and resistant to chemicals.

When choosing the right protective gloves, in addition to the material, other quality aspects must be taken into account, which differ from manufacturer to manufacturer.

Regarding the exact breakthrough time of the protective gloves, contact the manufacturer of the protective device for detailed information and keep the information you receive in mind.

Take off the contaminated protective gloves and clean them before using them again.

Respiratory protection:

In case of exceeding the exposure limit values, a respiratory protection according to the regulations must be used.

Environmental exposure controls

Do not discharge into sewers, living water or the environment.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties:

a)	Physical state:	Aerosol
b)	Colour:	Yellowish brown
c)	Odour:	Oily
	Odour threshold:	No data available.
d)	Melting point/freezing point:	-187.6 – -138.3 °C (propellant gas)

e)	Boiling point or initial boiling point and boiling range: -104 – -60 °C (propellant gas)	
f)	Flammability:	Extremely flammable aerosol.
g)	Lower and upper explosion limit:	No data are available for this product.
h)	Flash point:	260 °C (Cirkan C 220, ISO 25952)
i)	Auto-ignition temperature:	No data are available for this product. 287-537 °C (propellant gas)
j)	Decomposition temperature:	No data available.
k)	pH:	No data available.
l)	Kinematic viscosity:	220 mm^2/s (40 °C, Cirkan C 220, ISO 3104)
m)	Solubility:	Insoluble in water. 24.4-60.4 mg/l (propellant gas)
n)	Partition coefficient n-octanol/water (log value): > 6 (Cirkan C 220)	
o)	Vapour pressure:	≤ 1600 kPa (70 °C, propellant gas)
p)	Density and/or relative density:	No data are available for this product. ≥ 0.505 g/cm^3 (50 °C, propellant) 0.879 g/cm^3 (15 °C, Cirkan C 220, ISO 3675)
q)	Relative vapour density:	No data available.
r)	Particle characteristics	No data available.

9.2 Other information:
No other information available.

SECTION 10: Stability and reactivity

10.1 Reactivity: Not known under prescribed storage and use.

10.2 Chemical stability: It is stable when stored and used as prescribed.

10.3 Possibility of hazardous reactions: Product vapours can form explosive mixtures with air, which are heavier than air.

10.4 Conditions to avoid: Keep away from heat, hot surfaces, sparks, open flames and other sources of ignition. No smoking. Pressurized container. Do not open, knock or pierce. Do not expose to heat exceeding 50 °C. Do not expose to sunlight or radiant heat. Do not pierce or throw into fire, even after use. Do not spray on an open flame or other ignition source. Do not refill the bottle.

10.5 Incompatible materials: Strong alkalis, oxidizing agents.
Information on propellant gas: In contact with nitrates and other oxidizing agents (e.g. chlorates, perchlorates, liquid oxygen) explosive mixtures can be formed.

10.6. Hazardous decomposition products: No hazardous decomposition products released under normal use are known. In case of fire and incomplete combustion, dangerous decomposition products may be released.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008:

- acute toxicity: Based on available data, the classification criteria are not met.

Information on components:
Data on the mineral oil component:
Inhalation of higher concentrations of vapours may irritate the respiratory tract. If swallowed, it can cause gastrointestinal irritation, vomiting and diarrhea.
High pressure subcutaneous injection can have serious consequences even in the absence of symptoms.
The mineral oils in the product contains less than 3 % DMSO extract as measured by IP 346 'Determination of polycyclic aromatics in unused lubricating base oils and asphaltene free petroleum fractions — Dimethyl sulphoxide extraction refractive index method', Institute of Petroleum, London (according to note L of Regulation (EC) No. 1272/2008).
Propellant data:
Propane:
Inhalation (rat): 1443 mg/l (literature data)
Butane:
Inhalation (rat): 658 mg/l (literature data)
Isobutane:
Inhalation (mouse): 974 mg/l (literature data)

Additional effects:
Information on components:
Data on the mineral oil component:
In case of prolonged or repeated exposure (contact with contaminated clothing), characteristic skin lesions (blisters) may occur.

- skin corrosion/irritation: Based on available data, the classification criteria are not met.
- serious eye damage/irritation: Based on available data, the classification criteria are not met.
- respiratory or skin sensitisation: Based on available data, the classification criteria are not met.
- germ cell mutagenicity: Based on available data, the classification criteria are not met.
- carcinogenicity: Based on available data, the classification criteria are not met.
- reproductive toxicity: Based on available data, the classification criteria are not met.
- STOT-single exposure: Based on available data, the classification criteria are not met.
- STOT-repeated exposure: Based on available data, the classification criteria are not met.
- aspiration hazard: Based on available data, the classification criteria are not met.

11.2 Information on other hazards:
Information on likely routes of exposure: Inhalation, skin contact, eye contact.
Data on the mineral oil component:
Inhalation of higher concentrations of vapors may irritate the respiratory tract. If swallowed, it can cause gastrointestinal irritation, vomiting and diarrhea.
High pressure subcutaneous injection can have serious consequences even in the absence of symptoms.
Propellant data:
Propellant gas in higher concentrations can cause suffocation and lack of oxygen.

SECTION 12: Ecological information

12.1 **Toxicity:** Based on available data, the classification criteria are not met.
Do not allow the product to enter water, sewers or the soil.
Information on ingredients:
Propellant data:
Propane:
LC50 (fish): 49.47 mg/l (literature data)
LC50 (other aquatic organisms): 27.14 mg/l (literature data)
EC50 (algae): 11.89 mg/l/72h (literature data)
Butane:
LC50 (fish): 24.11 mg/l (literature data)
LC50 (other aquatic organisms): 14.22 mg/l (literature data)
EC50 (algae): 7.71 mg/l/96h (literature data)
Isobutane:
LC50 (fish): 27.89 mg/l (literature data)
LC50 (other aquatic organisms): 16.33 mg/l (literature data)
EC50 (algae): 89.57 mg/l/96h (literature data)

12.2 **Persistence and degradability:** No data are available for this product.

12.3 **Bioaccumulative potential:** No data are available for this product.
Information on ingredients:
Propellant data:
Propane:
log Kow: 1.09-2.8 (literature data)
Butane:
log Kow: 1.09-2.8 (literature data)
Isobutane:
log Kow: 1.09-2.8 (literature data)

12.4 **Mobility in soil:** No data are available for this product.

12.5 **Results of PBT and vPvB assessment:** The product does not contain PBT or vPvB substances.

12.6 **Endocrine disrupting properties:** No data are available.

12.7 **Other adverse effects:** Mineral oil can create a film on the surface of the water, thereby preventing oxygen exchange.

SECTION 13: Disposal considerations

13.1 **Waste treatment methods:**
Hazardous waste. It cannot be treated together with municipal waste.
Disposal of mixed, contaminated packaging:
It may be disposed of in accordance with local regulations (Act CLXXXV of 2012, Government Decree 225/2015 (VIII. 7) and VM Decree 72/2013 (VIII. 27).
Waste catalogue code:
16 05 04* gases containing dangerous substances stored in pressure-resistant containers (including halons)
*: hazardous waste

It must be disposed of in accordance with the relevant regulations.
Packaging waste is considered hazardous.
Prevent the aerosol from entering the environment.
Pressurized container. Do not pierce or throw into fire, even after use.
It is forbidden to open, knock, pierce, and expose to temperatures exceeding 50 °C, sunlight, or radiant heat. Do not throw into fire even after use.

SECTION 14: Transport information

14.1 UN number or ID number: UN 1950

14.2 UN proper shipping name: ADR/RID; AND; IMDG; IATA: AEROSOLS, flammable

14.3 Transport hazard class(es):

ADR/RID:

Class: 2

Classification code: 5F

Labels: 2.1

Transport category (Tunnel restriction code): 2 (D)

Limited and excepted quantities: 1 L E0

14.4 Packing group: None.

14.5 Environmental hazards: No data are available.

14.6 Special precautions for user: No data are available.

14.7 Maritime transport in bulk according to IMO instruments: Not applicable.

SECTION 15: Regulatory information

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

Chemical safety:

COMMISSION REGULATION (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC

REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (CLP)

Act No. XXV. of 2000 on Chemical Safety

Decree No. 44/2000 (XII.27.) EüM on the detailed rules for certain procedures and activities related to dangerous substances and dangerous preparations

Health and safety:
Decree No. 3/2002 (II.08.) SzCsM-EüM concerning the minimum safety and health requirements of workplaces
Act No. XCIII. of 1993 on occupational safety
Decree No. 65/1999 (XII. 22.) EüM on on the minimal safety and health protection requirements regarding the utilization of individual protection tools by workers at the workplaces
Decree No. 5/2020 (II. 6.) ITM on the Protection of the Health and Safety of Workers from the Risks Related to Chemical Pathological Factors
Waste management:
Act No. CLXXXV. of 2012 on Waste
Governmental Decree No. 225/2015 (VIII. 7.) on detailed rules of certain activities related to hazardous waste.
Governmental Decree No. 442/2012 (XII. 29.) on packaging and on waste management activities related to packaging waste
Decree No. 72/2013 (VIII. 27.) VM concerning the list of wastes
Transport:
Decree No. 61/2013 (X. 17.) NFM on the domestic application of Annexes A and B to the European Agreement Concerning the International Carriage of Dangerous Goods by Road (ADR)
Other:
Decree No. 34/2014. (X. 30.) NGM on the requirements for the distribution of aerosol products and aerosol packaging

15.2. Chemical safety assessment: The supplier has not carried out a chemical safety assessment.

SECTION 16: Other information

a) This document is the first English version of the safety data sheet of the product of the same name. The English translation was based on version 2 of the Hungarian safety data sheet of the product dated 8 December 2022.

b) Explanation of abbreviations and acronyms used in the safety data sheet:
CAS Number: A number used to identify the chemical substance (Chemical Abstracts Service).
PBT substances: Persistent, Bioaccumulative and Toxic substances.
vPvB substances: very Persistent and very Bio-accumulative substances.
LD50: The amount of a dose, given all at once, which causes the death of 50% of a group of test animals (Lethal Dose).
LC50: The amount of a concentration, given all at once, which causes the death of 50% of a group of test animals (Lethal Concentration).
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
IMO: International Maritime Organization.
RID: Regulations concerning the International Carriage of Dangerous Goods by Rail.
ICAO: International Civil Aviation Organization.

c) The hazard classification was carried out by the supplier according to the 1272/2008/EC, based on test method (test data).

d) The full text of the H sentences in Section 3 of the safety data sheet:

H220 Extremely flammable gas.
H222 Extremely flammable aerosol.
H229 Pressurised container: May burst if heated.

The safety data sheet has been prepared in accordance with the applicable EU and Hungarian legislation in force. It is limited to our current knowledge, does not guarantee the properties of the product and does not form the basis of any legal relationship.