Safety Data Sheet

According to Regulation (EC) No 1907/2006, Annex II and Commission Regulation (EU) 2015/830

Version 1.0: 03.05.2019

ZAP Grease CHISEL Paste

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

1.1. Product Identifier

ZAP Grease CHISEL Paste

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

Grease paste containing copper powder and graphite.

1.3. Details of the supplier of the safety data sheet

ZAP LUBES SIA,
5 VISKALU STREET
LV-1026 RIGA, LATVIA
Phone: + 371 67543642
e-mail: sales@zap-grease.com
www.zap-grease.com

1.4. Emergency telephone number

State Fire And Rescue Service Of Latvia: +371 112
Valsts Toksikoloģijas Centrs (National Toxicology Center), **Saindēšanās un zāļu informācijas centrs** (Poisoning and Drug Information Centre)
Address: Hipokrāta 2, LV-1038 Riga, Latvia,
Phone: +371 67042473, service is available 24 hours

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 (CLP)

Aquatic Acute 1; H400 Very toxic to aquatic life
Aquatic Chronic 3; H412 Harmful to aquatic life with long lasting effects

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP)

Hazard pictograms

GHS09

Signal word	Warning	
Hazard statements	H400	Very toxic to aquatic life.
	H412	Harmful to aquatic life with long lasting effects.
Precautionary statements		
General	P101	If medical advice is needed, have product container or label at hand.
	P102	Keep out of reach of children.
Prevention	P273	Avoid release to the environment.
Response	P391	Collect spillage.
Storage	None	
Disposal	P501	Dispose of contents and container in accordance with local/regional/national/ international regulations.
Voluntary supplemental label elements	EUH210	Safety Data Sheet available on request.

2.3. Other hazards

The product does not contain any substance which meets the criteria for PBT and vPvB in accordance with Annex XIII.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Mixture Description Grease paste containing copper powder and graphite.

Substance name	%, weight	REACH Registration No.	EINECS/CAS No	Classification according to regulation (EC) No 1272/2008 (CLP)
Residual oils (petroleum), hydrotreated	30 - 50	01-2119489287-22-0007	265-160-8 / 64742-57-0	Not classified.
Lubricating oils (petroleum), C24-50, solvent-ext., dewaxed, hydrogenated	20 - 40	01-2119489969-06	309-877-7/101316-72-7	Not classified.
Graphite	5 - 15	*	231-955-3 / 7782-42-5	Not classified.
Copper powder	2.5 - 10	*	231-159-6 / 7440-50-8	Acute Tox. 4; H302 Aquatic Acute 1, H400 (1) Aquatic Chronic 2, H411
Zinc Powder	0.5 - 1.5	*	231-175-3 / 7440-66-6	Aquatic Acute 1, H400 (2) Aquatic Chronic 1, H410 (2)

NOTES:

All mineral oils are considered to be severely refined and not considered to be carcinogenic under IARC. All the oils in this product contain < 3% DMSO extract (IP 346).

* Not available or substance is not currently required for registration under REACH.

M factor: (1) acute = 10; (2) not stated.

For a full text of relevant hazard statements, hazard classes and category codes: See SECTION 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	If irritation, headache, nausea, or drowsiness occurs, remove to fresh air. Get medical attention if breathing becomes difficult or symptoms persist.
Skin contact	Wash skin with plenty of soap and water for several minutes. Get medical attention if skin irritation develops or persists.
Eye contact	Remove contact lenses before flushing, if any and easy to do. Immediately flush eyes with plenty of clean water keeping eyelids apart. Get medical attention if eye irritation persists.
Ingestion	DO NOT INDUCE VOMITING. Get medical attention. Never give anything by mouth to an unconscious or convulsing person.
Need of immediate medical attention	If nausea or irritations do not appear after ingestion, give medical carbon in water slurry (3 tablespoons in one litre water).

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

Prolonged inhalation of unusually high concentrations of product mist or vapours may cause nose and lung irritation, headache, nausea and drowsiness.

Prolonged or repeated skin contact may produce allergic reactions such as redness, rash and dermatitis.

Prolonged eye contact may cause irritation, redness and discomfort.

If more than several mouthfuls are swallowed, abdominal discomfort, nausea, and diarrhea may occur.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing media	Use water fog, dry powder, foam or carbon dioxide. Use water to cool fire-exposed containers. If the leak or spill has not ignited, use water fog to disperse the vapours and to provide protection for personnel attempting to stop the leak.
Unsuitable Extinguishing media	Water jet

5.2. Special hazards arising from the substance or mixture

Smoke, carbon monoxide, carbon dioxide and other products of incomplete combustion.

5.3. Advice for firefighters

Special protective equipment for firefighters	The nature of special protective equipment required will depend upon the size of the fire, the degree of confinement of the fire and the natural ventilation available. Fire-resistant clothing and self-contained breathing apparatus is recommended for fires in confined spaces and poorly ventilated areas. Full fireproof clothing is recommended for any large fires involving this product.
Extinguishing procedures	In case of fire - always call the fire brigade. Small fires, such as those capable of being fought with a hand-held extinguisher, can normally be fought by a person who has received instruction on the hazards of flammable liquid fires. Fires that are beyond that stage should only be tackled by people who have received hands-on training. Ensure escape path's available.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2. Environmental precautions

Prevent entry into sewers and waterways. Pick up free liquid for recycle and/or disposal. Residual liquid can be absorbed on inert material.

6.3. Methods and material for containment and cleaning up

Clean-up spill as soon as possible while following the requirements for exposure control/personal protection. Use sand and sawdust to clean. Use appropriate cleaning techniques such absorption by fire resistant material or pumping.

6.4. Reference to other sections

See Section 8 for more information on personal protective equipment.
See Section 13 for waste disposal practices.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid prolonged or repeated contact with skin. Avoid breathing of vapours. Wash

hands after handling. Do not smoke.

7.2. Conditions for safe storage, including any incompatibilities

Keep containers closed when not in use. Avoid exposure to heat. Store at ambient temperature. Do not store near explosive substances, compressed, liquefied or pressurized gases, flammable liquids or oxidizing agents.

7.3. Specific end use(s)

In accordance with the relevant product specification.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits: Union occupational exposure limit values do not refer to any components of a mixture specified in Section 3.
Please refer to National occupational exposure limits, if applicable.

DNELs

Copper		
Dermal	Acute/short term exposure - systemic effects	273 mg/kg bw/day (Worker) 273 mg/kg bw/day (Consumer)
	Long term - systemic effects	137 mg/kg bw/day (Worker)
Inhalative	Acute/short term exposure - systemic effects	20 mg/m^3 (Consumer) 20 mg/m^3 (Worker)
Zinc		
Oral	Long term - systemic effects	0.83 mg/kg bw/day (Consumer)
Dermal	Long term - systemic effects	83 mg/kg bw/day (Consumer) 83 mg/kg bw/day (Worker)
Inhalative	Long term - systemic effects	2.5 mg/m^3 (Consumer) 5 mg/m^3 (Worker)

8.2. Exposure controls

Appropriate engineering controls	Use in well-ventilated areas.
Individual protection measures, such as personal protective equipment	Follow the good occupational and personal hygiene practices to control product exposures.
Eye/face protection	Safety goggles.
Hand protection	Neoprene gloves. Time for wearing out the gloves material >30 minutes.
Skin/body protection	Exposed employees should exercise reasonable personal cleanliness. This includes cleansing exposed skin areas several times daily with soap and water and laundering or dry cleaning soiled work clothing. Long sleeve shirt is recommended. Use chemically protective boots when necessary to avoid contaminating shoes. Do not wear rings, watches or similar apparel that could entrap the material and cause a skin reaction.
Respiratory protection	No respiratory protection is normally required. If vapour or mist is generated, use approved respirator as appropriate.
Thermal hazards	Not available.
Hygiene measures	When using, do not eat, drink or smoke. 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 exposure control	May form an oil film leading to de-oxygenation of water and possible harmful effect on aquatic life. Product can penetrate soil until reaching the surface of ground water (in the presence of ground water).

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Semi-solid
Colour	Copper-Gray
Odour	Petroleum
Odour threshold	Not applicable
pH	Not applicable
Freezing/Pour point, °C	Not applicable
Initial boiling point and boiling range, °C	Not applicable
Flash point, °C (Pensky-Martens Closed Cup)	>250 for base oil
Evaporation rate	No data available
Flammability (solid, gas)	Not applicable
Upper/lower flammability or exposure limits	Not applicable
Vapour pressure	Not applicable
Vapour density	Not applicable
Relative density at 20°C, g/ml	< 1
Solubility	Soluble in hydrocarbons, insoluble in water
Partition coefficient: n-octanol/water	No data available
Auto-ignition temperature, °C	Not applicable
Decomposition temperature, °C	Not applicable
Kinematic viscosity, mm^2/s	320 mm^2/s at 40°C (for base oil)
Explosive properties	None
Oxidising properties	None

9.2. Other Information

Dropping point, °C	>305

SECTION 10: Stability and reactivity

10.1. Reactivity: Not expected to enter reactions.

10.2. Chemical stability: This product is considered chemically stable at normal storage and handling conditions.

10.3. Possibility of hazardous reactions: None

10.4. Conditions to avoid: This product is normally stable at moderately elevated temperatures and pressures.

10.5. Incompatible materials: Strong oxidizing agents, strong acids.

10.6. Hazardous decomposition products: None known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity	Based on data available for base oils: the classification criteria are not met. LD_{50} oral (rats) > 5000 mg/kg (OECD 401) LD_{50} dermal (rabbits) > 5000 mg/kg (OECD 402) LC_{50} inhalation (rats) > 5 mg/l/4h (OECD 403) Zinc: LD_{50} oral (rats) > 2000 mg/kg LC_{50} inhalation (rats) > 5.4 mg/l/4h
Skin corrosion/irritation	Not expected to cause skin corrosion or irritation. Repeated or prolonged contact with skin may defat or dry the skin resulting in discomfort and dermatitis.
Serious eye damage/irritation	Not expected to cause serious eye damage or irritation. May cause eyes irritation. May cause minimal irritation or redness if accidental eye contact occurs.
Respiratory or skin sensitisation	Not expected to be respiratory or skin sensitizer. Prolonged or repeated skin contact as from clothes wetted with material may cause dermatitis.
Germ cell mutagenicity	No data available to indicate product or any components present at levels greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	This product is not considered to be a carcinogenic by IARC, ACGIH, NTP or OSHA. Nota L – meets EU requirement of less than 3% (w/w) DMSO extract for total polycyclic aromatic compound using IP 346.
Reproductive toxicity	Not expected to have reproductive toxicity. Based on date for similar substances.
STOT-single exposure	Not expected to damage specific target organs. Based on date for similar substances.
STOT-repeated exposure	Not expected to damage specific target organs. Based on date for similar substances.
Aspiration hazard	The mixture does not meet the criteria for classification.
Other information	If material is misted or if vapours are generated from heating, exposure may cause irritation of mucous membranes and the upper respiratory tract.

SECTION 12: Ecological information

12.1 Toxicity	Very toxic to aquatic life. Harmful to aquatic life with long lasting effects. Base oils: LC_{50} for base oil (96 hours for fish) is > 100 mg/l (OECD 203) EC_{50} for base oils (48 hours for Daphnia) is > 10 000 mg/l (OECD 202) EC_{50} for base oils (72-96 hours for algae or other aquatic plants) > 100 mg/l (OECD 201) NOEL/21 days (aquatic invertebrates) > 10 mg/l (OECD 211) NOEL/72 h (algae) > 100 mg/l NOEL/10 min (micro organisms) > 1.93 mg/l (DIN 38412, DIN 38409) Zinc: IC_{50} (invertebrates) > 23 mg/l LC_{50} (fish): 182-203 μg/l Copper:

		EC_{50} (crustacean): 0.02 mg/l EC_{50} (algae): 0.57 mg/l
12.2	**Persistence and degradability**	This product is not readily biodegradable. Information about base oil-Inherent biodegradability <22% after 28 days (OECD 301B).
12.3	**Bioaccumulative potential**	Partition coefficient n-octanol/water (log K_{OW}) for base oils is > 4.0 - indicates possible bioaccumulation.
12.4	**Mobility in soil**	Low, due to low water solubility. Spillage may penetrate the soil causing ground water contamination.
12.5	**Results of PBT and vPvB assessment**	This product is not and does not contain any substance that is potential PBT or vPvB.
12.6	**Other adverse effects**	May form an oil film leading to deoxygenation of water and possible harmful effect on aquatic life.

SECTION 13: Disposal consideration

13.1	**Waste treatment methods**	Dispose of empty lubricant containers at approved for such wastes places. Follow all state or local regulations and requirements for disposal, recycle or reclaiming of waste oils and petroleum products.
	Waste Code	13 08 99* in accordance with European Waste Catalogue (E. W. C.)

SECTION 14: Transport information

14.1	**UN Number**	3077
14.2	**UN proper shipping name**	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (contains copper powder).
14.3	**Transport hazard class(es)**	9
14.4	**Packing group**	III
14.5	**Environmental hazards**	
	ADR	Yes.
	RID	Yes.
	AND	Yes.
	IMDG	Yes. Marine pollutant.
	IATA	Yes.
14.6	**Special precautions to user**	No data available.
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

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

Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

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

15.2 Chemical safety assessment

Not available.

SECTION 16: Other information

Indication of which of the methods of evaluating information referred to in Article 9 of Regulation (EC) No 1272/2008 was used for the purpose of classification.

Classification in accordance with regulation (EC) No 1272/2008:	Evaluation method used:
Aquatic Acute 1; H400:	Classification according to calculation procedure.
Aquatic Chronic 3; H412:	Classification according to calculation procedure.

Revision Information	New SDS prepared according to Commission Regulation (EU) 2015/830.
Revision by sections	--
Issue date	03.05.2019

List of abbreviations

PBT	Persistent, Bioaccumulative, and Toxic
vPvB	very Persistent and very Bioaccumulative
LD_{50}	Lethal Dose 50 (median concentration of a toxicant that will kill 50% of the test animals within a designated period)
LC_{50}	Lethal Concentration 50 (concentration in water having 50% chance of causing death to aquatic life)
EC_{50}	Half maximal effective concentration
IC_{50}	Half maximal inhibitory concentration
NOEL	No-Observed-Effect Level
STOT	Specific Target Organ Toxicity

A list of relevant hazard statements, hazard classes and category codes

H302 - Harmful if swallowed
H400 - Very toxic to aquatic life
H410 - Very toxic to aquatic life with long lasting effects
H411 - Toxic to aquatic life with long lasting effects

Acute Tox. 4 - Acute toxicity - Hazard Category 4
Aquatic Acute 1 - Aquatic hazard (short-term) - Hazard Category 1
Aquatic Chronic 1 - Aquatic hazard (long-term) - Hazard Category 1
Aquatic Chronic 2 - Aquatic hazard (long-term) - Hazard Category 2

This information is the best of our current knowledge, and is believed to be correct as of the date hereof, and is intended to describe the product only in terms of health and safety and environmental requirements. Since the conditions of use are outside our control, any recommendations and suggestions are made without guarantee.

End of safety data sheet