Name of product: B-oil

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## Section 1: Identification of the substance / preparation and company / undertaking

1.1 Product identifier Trade name: B-oil

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

Application of the substance / the preparation: Operating fluid / lubricant for vacuum pumps

Uses advised against: -

1.3 Details of the supplier of the safety data sheet

VACUUBRAND GMBH + CO KG

Alfred-Zippe-Str. 4 97877 Wertheim

Germany

Telephone: +49 9342 808-0 Fax: +49 9342 808-5555 Email: info@vacuubrand.com 1.4 Emergency telephone number:

Emergency phone (supplier): +49 9342 808-0 (during standard office hours)

#### Section 2: Hazard identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 127212008: The product is not classified according to the CLP regulation.

Classification system: The classification is based on Regulation (EC) 1272/2008.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008: Void

Hazard pictograms: Void Signal word: Void Hazard statements: Void 2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable vPvB: Not applicable

#### Section 3: Composition / information of ingredients

3.1 Substance: -

3.2 Chemical characterisation: Mixtures

Description: Highly refined mineral oils and additives. The highly refined mineral oil contains < 3% (W/W)

DMSO extract, according to IP346. Dangerous components: Void

Additional information: IP346 = "Institute of Petroleum" (IP) Test method No. 346: Determination of polycyclic

aromatics DMSO-extractable.

#### Section 4: First aid measures

4.1 Description of first aid measures

General information: First aid personnel should pay attention to their own safety.

After inhalation: Supply fresh air; consult a doctor in ease of pain.

After skin contact: Remove contaminated clothes and shoes. Wash with water and soap. If skin irritation continues, consult a doctor.

After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor

After swallowing: After swallowing large amounts, call a doctor.

4.2 Most important symptoms and effects, both acute and delayed

Signs and symptoms of acne/folliculate: Blackheads and pimples on exposed skin.

After swallowing: Nausea, vomiting, diarrhoea.

4.3 Indication of any immediate medical attention and special treatment needed

Symptomatic treatment.

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## **Section 5: Fire fighting measures**

5.1 Extinguishing media

Suitable extinguishing agents: CO2, extinguishing powder or water spray. Fight larger fires with water spray

or alcohol resistant foam. In small quantities: Sand.

Use fire fighting measures that suit the environment.

For safety reasons unsuitable extinguishing agents: High volume water jet.

5.2 Special hazards arising from the substance or mixture

In case of fire, the following can be released: Complex mixture of solid and fluid particles and gases.

Carbon monoxide (CO) 5.3 Advice for firefighters

Protective equipment: Wear self-contained respiratory protective device.

Additional information: Heating leads to increased pressure and danger of bursting and explosion.

Immediately cool neighbouring packages and containers with sprayed water and, if possible, remove them out of the danger zone. Collect contaminated fire fighting water separately. It must not enter the sewage system. Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

### Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid any product contact. Avoid contact with eyes and skin. Do not breathe aerosol or vapors. Particular danger of slipping on leaked/spilled product.

6.2 Environmental precautions

Do not allow product to reach sewage system or any water course. Do not allow to penetrate the ground/soil.

6.3 Methods and material for containment and cleaning up

Absorb with non-combustible material like sand, soil or diatomite. Dam up larger quantities and pump into containers. Make sure to recycle or dispose of in suitable receptacles.

6.4 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.

### Section 7: Handling and storage

7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace. Avoid contact with eyes and skin. Do not breathe aerosol or vapors. Avoid inhalation of vapours formed by heated product.

Information about protection against explosions and fires:

Use only in explosion protected area. Observe the general rules of industrial fire protection. Protect against electrostatic charges. Assure that devices and containers are grounded.

7.2 Conditions for safe storage, including any incompatibilities

Storage: Requirements to be met by storerooms and receptacles: Store container tightly sealed at a cool and dry place with sufficient ventilation. Suitable material for containers and container coatings: Soft steel or high-density polyethylene (HDPE). Unsuitable material for receptacle: PVC.

Information about storage in one common storage facility: Store away from foodstuffs. Store away from feed. Refer to national regulations for storing hazardous chemicals.

Further information about storage conditions: Store under cool, dry conditions in well sealed receptacles.

Storage class: 10 Combustible liquids

7.3 Specific end use(s)

No further relevant information available.

### Section 8: Exposure controls / personal protection

Additional information about design of technical systems:

Install appropriate mechanical ventilation.

No further data; see section 7.

8.1 Control parameters

Components with limit values that require monitoring at the workplace: The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

8.2 Exposure controls

Personal protective equipment:

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General protective and hygienic measures:

The usual precautionary measures should be adhered to when handling chemicals. Keep away from foodstuffs, beverages and feed. Before breaks and at the end of work, thoroughly wash hands with water and soap, then rub-in skin protecting cream. Immediately remove soiled, soaked clothing and use again only after washing.

Breathing equipment:

Under normal conditions of use not required. In case of unintentional release of substance, exceeding the occupational exposure limit value: Suitable respiratory protective device is recommended. Where air-filtering respirators are suitable, select an appropriate combination of mask and filter. Select a filter suitable for combined particulate/organic gases and vapours (boiling point> 65°C, 149°F meeting EN 14387). Protection of hands: Chemical resistant gloves (EN 374). The glove material has to be impermeable and resistant to the product/substance/preparation. Selection of the glove material in consideration of the penetration times, rates of diffusion and the degradation. Material of gloves: Nitrile rubber, NBR, PVC, Neoprene. The selection of suitable gloves depends upon the material, and also upon the quality of the gloves. The degree of protection will vary from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material: The exact penetration time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection: Safety glasses, full-face mask EN 166. Body protection: Protective work clothing, safety footwear.

### Section 9: Physical and chemical properties

Appearance	Pale yellow, liquid at ambient temperature
Odour	Slightly hydrocarbon
ph value	Not applicable
Initial boiling point and boiling range	> 280°C estimated value
Pourpoint	Typical -9°C
Flash point	Typical 260°C (open cup)
Upper / lower flammability or explosion limits	Typical 1-10% (V) (based on mineral oil)
Auto ignition temperature	430°C
Density	866 kg/m <sup>3</sup> at 15°C
Water solubility	Not miscible or difficult to mix
n-octanol/water partition coefficient (Log Pow)	> 6 (based on information on similar products)
Kinematic viscosity	95 mm <sup>2</sup> /s at 40°C
Vapour density (air = 1)	> 1 at 20°C (estimated value)
Evaporation rate (nBuAc = 1)	Not determined

## Section 10: Stability / reactivity

- 10.1 Reactivity: No further relevant information available.
- 10.2 Chemical stability: Thermal decomposition *I* conditions to be avoided: No decomposition if used and stored according to specifications.
- 10.3 Possibility of hazardous reactions: Reacts with strong oxidising agents.
- 10.4 Conditions to avoid: Heat.
- 10.5 Incompatible materials: Strong oxidants.
- 10.6 Hazardous decomposition products: No hazardous decomposition products if instructions for storage and handling are followed.

## **Section 11: Toxicological information**

11.1 Information on toxicological effects

Acute toxicity

LD/LC50 values relevant for classification:

Oral LD50 > 5000 mg/kg (rat) estimated

Dermal LD50 > 5000 mg/kg (rabbit) estimated

Primary irritant effect: Skin corrosion/irritation. May cause irritation to the skin. Serious eye damage / irritation. Light irritation possible on respiratory tract.

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Respiratory or skin sensitization: Based on available data, the classification criteria are not met.

Additional toxicological information: Highly refined mineral oils are not classified as a carcinogen by the International Research on Cancer (IARC). Used oils may contain harmful impurities that have accumulated during use. The concentration of such impurities will depend on use and they may present risks to health and the environment on disposal. All used oil should be handled with caution and skin contact avoided as far as possible.

Classifications from other regulatory authorities under different regulatory frameworks can exist.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction):

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: No experimental or epidemiological sufficient evidence for specific target organ toxicity (single exposure).

STOT-repeated exposure: No experimental or epidemiological sufficient evidence for specific target organ toxicity (repeated exposure).

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

## **Section 12: Ecological information**

12.1 Toxicity

Aquatic toxicity: Presently there are no ecotoxicological values available. Poorly soluble mixture. May cause physical fouling of aquatic organisms.

Expected to be practically non toxic: LL/EL/IL50 > 100 mg/l (to aquatic organisms) (LL/EL50 expressed as the nominal amount of product required to prepare aqueous test extract). Mineral oil is not expected to cause any chronic effects to aquatic organisms at concentrations less than 1 mg/l.

12.2 Persistence and degradability

The product is not easily, but potentially biodegradable. Some of the compounds could be persistent in the environment.

12.3 Bioaccumulative potential

log P (o/w) > 4. Considerable bioaccumulation is to be expected.

12.4 Mobility in soil

Liquid under most environmental conditions. Floats on water. If it enters soil, it will adsorb to soil particles and will not be mobile.

Additional ecological information:

General notes: Water hazard class 1 (German Regulation) (Self-assessment): Slightly hazardous to water according to appendix 4 of VwVwS dated 27.07.2005 (German regulation). Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system. Danger to drinking water even if small quantities leak into the ground.

12.5 Results of PBT and vPvB assessment

PBT: Not applicable vPvB: Not applicable

12.6 Other adverse effects

Product is a mixture of non-volatile components, which are not expected to be released to air in any significant quantities. Not expected to have ozone depletion potential, photochemical ozone creation potential or global warming potential.

### Section 13: Disposal considerations

13.1 Waste treatment methods

Recommendation: Must not be disposed of together with household garbage. Do not allow product to reach sewage system. The used respectively the unused product should be recycled if possible. Disposal according to instructions of local authorities.

European waste catalogue:

130000 oil wastes and wastes of liquid fuels (except edible oils, and those in chapters 05,12 and 19)

130200 waste engine, gear and lubricating oils

130205\* mineral-based non-chlorinated engine, gear and lubricating oils

Uncleaned packages: Recommendation: Disposal must be made according to official regulations.

#### **Section 14: Transport information**

14.1 UN-Number

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ADR, ADN, IMDG, IATA: Void 14.2 UN proper shipping name ADR, ADN, IMDG, IATA: Void 14.3 Transport hazard class(es) ADR, ADN, IMDG, IATA Class: Void

14.4 Packing group ADR, IMDG, IATA: Void 14.5 Environmental hazards:

Marine pollutant: No

14.6 Special precautions tor user: Not applicable

14.7 Transport in bulk according to Annex 11 of Marpol and the IBC Code: Not applicable

For Bulk transport: Follow the rules of MARPOL Annex 1

Transport/additional information: Not dangerous according to the above regulations

UN "Model Regulation": Void

### **Section 15: Regulatory information**

15.1 Safety, health and environmental regulations/legislation specific tor the substance or mixture National regulations

Class Share in %:

NK 3.0

Water hazard class: Water hazard class 1 (Self-assessment): Slightly hazardous for water. 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

#### Section 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. Reasons for amendments: General revision.

#### Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistant and very Bioaccumulative

Sources: SDS of the supplier

All information contained in this material safety data sheet and in particular the health and safety and environmental information is accurate to the best of our knowledge. However, the company makes no warranty or representation, express or implied, as to the accuracy or completeness of such information. The provision of this material safety data sheet is not intended to obviate the need for all users to satisfy themselves that the product described is suitable for their purposes. It is the user's obligation to use this product safely and to comply with all applicable laws and regulations concerning the use of the product. The company accepts no responsibility for any injury, loss or damage, consequent upon any failure to follow the safety and other recommendations contained in this material safety data sheet, nor from any hazard inherent in the nature of the material, nor from any abnormal use of the material.