



Safety Data Sheet

SECTION 1. Identification of the substance and of the Company/undertaking

1.1. Product identifier

Name **Oil for Hydraulic and Circulation Systems**
Code **BREEZE HYDRAULIC FLUID 68**

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

Main uses: Use in hydraulic and circulation systems
All other uses are forbidden.

1.3. Details of the supplier of the safety data sheet

Company Name EPIFANEIA ENGINEERING LTD
Address 28 KM LAVRIOY AVE, 19400 (Koropi)
Location and State Greece
Tel. +30 2106628358
e-mail for the reference person for the safety data info@epifaneia.com

1.4. Emergency telephone number

For urgent information contact

Poison Centers (24/24 h):

| | |
|---|--------------------------------------|
| Austria Poison Information Centre (AT): | +43 1 31304 5620 |
| Belgium Poison Centre (BE): | +32 70 245 245 |
| Croatia Poison Control (CR): | +385 1 2348 342 |
| Czech Republic Poison Control (CS): + | +420 224 919 293, +420 224 915 402 |
| Denmark Poison Control Hotline (DK): | +45 82 12 12 12 |
| Estonia Poison Control (ET): | +37 2626 93 90 |
| Finland Poison Information Centre (FI): | +35 89 471 977 |
| France Orfila (FR): | + 01 45 42 59 59 |
| Germany Poison Centre Berlin (DE): | +49 03030686790 (German and English) |
| Greece Poison Information Center (EL): | +30 2107793777 |
| Hungary Poison Information Service (HU): | + 36 80 201-199 |
| Iceland Poison Information Center: Italy | +54 3 2222 |
| Poison Centre, Milan (IT): | +39 02 6610 1029 |
| Latvia Poison Information Center (LV): | +37 167042473 |
| Lithuania Poison Information Office (LT): | +370 5236 20 52 or +370 687 53 378 |
| Luxembourg Belgian Poison Center: | +35 2 8002-5500 |
| Netherlands National Poisons Center (NVIC): | +30 274 8888 |
| Norway Poison Center: | +22 59 13 00 |
| Portugal Poison Information Centre (PT): | +351 21 330 3284 |
| Spain Poison Information Service (ES): | +34 91 562 04 20 |
| Sweden: Information | 112 – ask for Poisons information |



SECTION 2. Hazards identification.

2.1. Classification of the substance or mixture.

The product is not classified as dangerous according to the provisions of Regulation (EC) 1272/2008 (CLP) (and subsequent amendments and adjustments). Any additional information regarding risks to health and / or the environment are given in sect. 11 and 12 of this sheet.

2.1.1 Regulation (EC) 1272/2008 (CLP) (and subsequent amendments and adjustments).

Not classified as hazardous.

2.2. Label elements.

Not applicable.

2.3. Other hazards.

Highly Refined Base Oils (Viscosity >20.5 mm²/s a 40°C)
The physical state: Liquid

SECTION 3. Composition/information on ingredients.

3.1. Substance.

Oil for hydraulic and circulation systems

| Identification | Conc. % | Classification 1272/2008 (CLP) |
|---|---------|--------------------------------|
| Lubricating oils | | |
| CAS. 74869-22-0 CE. 278-012-2 REACH registration number 01-2119495601-36-0009 | > 99 | Not classified Note L |

Full text of H and EUH – phrases are available in section 16.

Note L: The classification as a carcinogen is not necessary as it can be shown that the substance contains less than 3% DMSO extract according to IP 346 measurement "Determination of polycyclic aromatic substances in unused lubricating base oils and petroleum fractions without asphaltene - Dimethyl sulfoxide extraction", Institute of Petroleum, London. This note applies only to certain compound substances derived from the content in part 3. According to the criteria set by the EU (Note L, Annex VI Reg (EC) 1272/2008), this product must be considered as non-carcinogenic.

SECTION 4. First aid measures.

4.1. Description of first aid measures.

EYES: No hazard by this route in normal use. In case of eye contact, rinse with running water for at least 5 minutes.

SKIN: In case of skin contact, wash contaminated skin with soap and water.

INHALATION: No hazard by this route in normal use. If exposure to high concentration oil mists occurs, move the patient to fresh air. If liquid is inhaled, transport immediately to hospital.

INGESTION: Do not induce vomiting. Call a doctor.

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



For symptoms and effects due to the substances contained, see chap. 11.

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

Seek immediate medical attention and special treatments. Depending on the level of exposure, it is
Periodic medical check-up is recommended..

SECTION 5. Firefighting measures.

5.1. Extinguishing media.

SUITABLE EXTINGUISHING MEDIA

Carbon dioxide, foams, powders.

UNSUITABLE EXTINGUISHING MEDIA

Water jets directly on the flames. Water can be used to cool closed containers exposed to the flame, preventing bursts and explosions.

5.2. Special hazards arising from the substance or mixture.

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF A FIRE

In the event of combustion, hazardous fumes of carbon monoxide, carbon dioxide, fumes of unburnt hydrocarbons and other pyroscission products may be generated from the mixture or from the mixture.

5.3. Advice for firefighters.

GENERAL INFORMATIONS

Cool the containers with jets of water to avoid product decomposition and the development of substances potentially hazardous for health. Always wear equipment complete with fire protection. Collect the extinguishing water which must not be discharged into the sewers. Dispose of the contaminated water used for extinguishing and the residue of the fire according to current regulations.

EQUIPMENT

Normal fire fighting clothing, such as an open circuit compressed air breathing apparatus (EN 137), flame retardant suit (EN469), flame retardant gloves (EN 659) and boots for the Fire Brigade (HO A29 or A30).

SECTION 6. Accidental release measures.

6.1. Personal precautions, protective equipment and emergency procedures.

For non-emergency personnel

Leave the accident site if you do not have devices protected by respiratory and eye protection (see section 8).

For emergency responders

Stop the leak if there is no danger. Limit the accident area. Wear protective equipment Avoid breathing vapors, mists and gases.

6.2. Environmental precautions.



Prevent the product from entering drains, surface waters, groundwater. Notify the competent authorities in case of spills / leaks.

6.3. Methods and material for containment and cleaning up.

Dike the spill area and absorb the inert materials (eg: sand); remove using suitable equipment and dispose of in containers for recovery or disposal. Remove the residue with jets of water if there are no contraindications.

Provide sufficient ventilation of the place affected by the leak. Check for any incompatibilities for container material in section 7. Disposal of contaminated material should be organized in accordance with the provisions of point 13.

6.4. Reference to other sections.

Any information regarding personal protection and disposal is given in sections 8 and 13.

SECTION 7. Handling and storage.

7.1. Precautions for safe handling.

Avoid the formation of oily mists and prevent the release of the product into the environment. Do not inhale any vapors or mists. Avoid dispersal of the product in the environment. Work in adequately ventilated areas. Avoid flames and sparks. Do not eat, drink or smoke during use. Remove contaminated clothing and protective equipment before entering areas where you eat.

7.2. Conditions for safe storage, including any incompatibilities.

Conditions for safe storage, including any incompatibilities. Keep only in the original container. Keep containers closed, in a well-ventilated place, away from direct sunlight. Keep containers away from any incompatible materials, checking section 10. Do not store in open and unlabeled containers. Do not store near sources of heat, sparks, flames or strong oxidants.

7.3. Specific end use(s).

See annex 1 of the safety data sheets.

SECTION 8. Exposure controls/personal protection.

8.1. Control parameters.

Reference:

OEL EU Directive 2009/161/UE; Directive 2006/15/CE; Directive 2004/37/CE; Directive 2000/39/CE; Directive 2017/164/UE; Directive 2017/2398/UE

TLV-ACGIH ACGIH 2019

ECHA REACH Registration Dossier

| Lubricating oils | | | | | | |
|--------------------------|-------|-----------------------------|-----|---------------------------------|-----|------------|
| Valore limite di soglia. | | | | | | |
| Tipo | State | TWA/8h mg/m ³ | ppm | STEL/15min mg/m ³ | ppm | Note* |
| TLV-ACGIH | US | 10 | | - | | Oily Mists |
| TLV-ACGIH | US | 5 | | - | | Oily Mists |

| | | | |
|--------------------------------|-----------|-----------------------|---------------------------------|
| DNEL Workers | UE | 2.73 | Long term exposure - Inhalation |
| DNEL Workers | UE | 0.97 mg/kg/day | Long term exposure - Dermal |
| DNEL General Population | UE | 0.74 mg/kg/day | Long term exposure - Oral |

8.2. Exposure controls.

Considering that the use of adequate technical measures should always have priority over personal protective equipment, make sure that you have good ventilation in the workplace through effective local extraction.

Activities involving the use of chemicals must be assessed for health risks to ensure adequate exposure control. The use of personal protective equipment should only be considered after appropriately assessing the other control measures (e.g. engineering controls). The personal protective equipment must comply with the appropriate standards, suitable for the specific use, maintained in good condition and subjected to correct maintenance. For the choice of personal protective equipment, if necessary ask for advice from your chemical suppliers and check that the individual protection devices must bear the CE marking which certifies their compliance with the standards in force. Absolute ban on consuming or taking food or drinks in the workplace.

HAND PROTECTION

The substances contained in the article are not dangerous for skin contact, however in case of prolonged contact it is advisable to protect the hands with work gloves made of nitrile, PVC or PVA resistant to penetration (ref. Standard EN 374). Gloves with a minimum breakthrough time of 240 minutes or > 480 minutes if suitable gloves can be found. Wash your hands after using the product or when finished.

EYE PROTECTION

In the event of dust formation during the use of the product, it is recommended to wear airtight protective goggles (ref. Standard EN 166).

RESPIRATORY PROTECTION

No hazard by this route in normal use, however, if the threshold value (eg TLV-TWA) of the substance or one or more of the substances present in the product is exceeded, it is advisable to wear a mask with filter for organic vapors of type A whose class (1, 2 or 3) must be chosen in relation to the limit concentration of use. (ref. Standard Half face filtering mask: EN 149, Half face filtering mask with valve: EN 405, Half face mask: EN 140 plus filter, Full mask: EN 136 plus filter, Particulate filters: EN 143, Gas / combined filters: EN 14387)

SECTION 9. Physical and chemical properties.

9.1. Information on basic physical and chemical properties.

| | |
|------------------------------|-----------------|
| Physical state | Liquid. |
| Color | Yellow. |
| Odour | Typical. |
| Odour threshold | Not applicable. |
| pH. | Not applicable. |
| Melting point/freezing point | -27°C |
| Initial boiling point | >360°C |
| Boiling range | |
| Flash point | >200°C |
| Evaporation rate | Not available. |
| Flammability (solid, gas) | Not available. |
| Lower flammability limits | Not available. |
| Upper flammability limits | Not available. |



| | |
|--|-----------------------------------|
| Lower explosive limits | Not available. |
| Upper explosive limits | Not available. |
| Vapour pressure | < 0.01 hPa |
| Vapour density | >2. |
| Relative density | 880 Kg/m ³ Max at 15°C |
| Solubility | Negligible. |
| Partition coefficient: n-octanol/water | Not available. |
| Auto-ignition temperature | >325°C |
| Decomposition temperature | Not available. |
| Viscosity at 40°C | 61.2 to 74.8 mm/s ² |
| Viscosity at 100°C | 11.0 mm/s ² |
| Explosive properties | Not available. |
| Oxidising properties | Not available. |

9.2. Other information.

Complete miscibility, in hydrocarbons and in most organic solvents.

SECTION 10. Stability and reactivity.

10.1. Reactivity.

Non reactive.

10.2. Chemical stability.

The product is stable under normal conditions of use and storage.

10.3. Possibility of hazardous reactions.

None

10.4. Conditions to avoid.

Avoid exposing the product, especially if in closed containers, sources of intense heat. Avoid overheating, open flames and sparks.

10.5. Incompatible materials.

Strong oxidizing agents.

10.6. Hazardous decomposition products.

None.

SECTION 11. Toxicological information.

11.1. Toxicological information.

The health hazards of the product have been assessed for the substances contained, according to the criteria established by the reference legislation for classification. Therefore consider the concentration of

the single dangerous substances eventually mentioned in sect. 3, to evaluate the toxicological effects deriving from exposure to the product.

a) Acute toxicity;

The product is not classified for this hazard class.

- LD50 (oral):> 5000 mg / Kg bw (non-toxic)
- LD50 (dermal):> 2000 mg / Kg bw (non-toxic)
- LC50 (inhalation):> 5000 mg / m³ air (non-toxic)

b) Skin corrosion / irritation;

The product is not classified for this hazard class.

c) Serious eye damage / serious eye irritation;

The product is not classified for this hazard class.

d) Respiratory or skin sensitization;

The product is not classified for this hazard class.

e) Germ cell mutagenicity;

The product is not classified for this hazard class.

f) Carcinogenicity;

The product is not classified as cangerogen by oral, dermal or inhalation exposure (OECD 453).

g) Reproductive toxicity;

The product is not classified as toxic for reproduction (OECD 421)

- Oral route: NOAEL: 1000 mg / Kg bw / day
- Dermal route: NOAEL: 2000 mg / Kg bw / day

h) Specific target organ toxicity (STOT) - single exposure;

The product is not classified for this hazard class.

i) Specific target organ toxicity (STOT) - repeated exposure;

The product is not classified for this hazard class.

j) Aspiration hazard;

The product is not classified for this hazard class. kinematic viscosity: >20.5 mm² / s (40 ° C) (ASTM D 445).

SECTION 12. Ecological information.

The product is not dangerous for the environment and does not present a high toxicity for aquatic organisms with long-term negative effects for the aquatic environment.

12.1. Toxicity.

Not Toxic.

12.2. Persistence and degradability.

The product is biodegradable; moderately persistent, especially in anaerobic conditions

12.3. Bioaccumulative potential.

Bioavailability for aquatic organisms is minimal and therefore bioaccumulation appears unlikely.



12.4. Mobility in soil.

Information not available.

12.5. Results of PBT and vPvB assessment.

The product does not contain PBT or vPvB substances in a percentage higher than 0.1%.

12.6. Other adverse effects .

Information not available.

SECTION 13. Disposal considerations.

13.1. Waste treatment methods.

The hazardousness of the waste must be assessed on the basis of the current laws.

Disposal must be entrusted to a company authorized to manage waste, in compliance with national and possibly local regulations.

Absolutely avoid dispersing the product in the ground, in sewers or waterways.

CONTAMINATED PACKAGING

Contaminated packaging must be sent for recovery or disposal in compliance with national waste management rules and must not be abandoned after use. Dispose of safely according to local and national regulations in force. Do not cut, weld, puncture, burn or incinerate containers or drums without having been reclaimed and declared safe.

SECTION 14. Transport information.

The product is not dangerous under current provisions governing the transport of dangerous goods by road (A.D.R.) and by Rail (RID), by sea (IMDG Code) and by air (IATA).

14.1 UN number; 14.2. UN proper shipping name; 14.3. Transport hazard class(es); 14.4. Packing group; 14.5. Environmental hazards; 14.6. Special precautions for user.

Non applicable

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.

Seveso Category. None

Restrictions for the substances contained according to Annex XVII Regulation (EC) 1907/2006.
Product.



Point 3

Substance in Candidate List (Art. 59 REACH).

None

Substance under authorization (Annex XIV REACH).

None

Sostanze subject to export notification obligation Reg. (CE) 649/2012:

None

Substances under to the Rotterdam Convention:

None

Substances under to the Rotterdam Convention:

None.

Other UE Regulation

None.

15.2. Chemical safety assessment .

A chemical safety assessment has been realized for the substances contained in the mixture.

SECTION 16. Other information.

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

| | |
|------------|--|
| Asp. Tox 1 | Aspiration hazard |
| H304 | May be fatal if swallowed and enters airways |

LEGEND:

- ADR: European agreement for the transport of dangerous goods
- CAS NUMBER: Chemical Abstract Service number
- CE50: Concentration that gives effect to 50% of the population subject to testing
- CE NUMBER: Identification number in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived no effect level
- EmS: Emergency Schedule
- GHS: Global harmonized system for the classification and labeling of chemical products
- IATA DGR: Regulations for the transport of dangerous goods of the International Air Transport Association
- IC50: Immobilization concentration of 50% of the test population
- IMDG: International maritime code for the transport of dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identification number in Annex VI of the CLP
- LC50: Lethal concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational exposure level
- PBT: Persistent, bioaccumulating and toxic according to REACH
- PEC: Predictable environmental concentration
- PEL: Predictable level of exposure



- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulations for the international transport of dangerous goods by train
- TLV: Threshold limit value
- TLV CEILING: Concentration that must not be exceeded during any moment of the work exposure.
- TWA STEL: Short term exposure limit
- TWA: Weighted average exposure limit
- VOC: Volatile organic compound
- vPvB: Very persistent and very bioaccumulating according to REACH
- WGK: Aquatic hazard class (Germany).

GENERAL BIBLIOGRAPHY:

1. Regulation (EC) 1907/2006 of the European Parliament (REACH)
2. Regulation (EC) 1272/2008 of the European Parliament (CLP)
3. Regulation (EC) 790/2009 of the European Parliament (I Atp. CLP)
4. Regulation (EC) 286/2011 of the European Parliament (II Atp. CLP)
5. Regulation (EC) 618/2012 of the European Parliament (III Atp. CLP)
6. Regulation (EU) no. 487/2013 of the Commission (IV Atp. CLP)
7. Regulation (EU) no. 944/2013 of the Commission (V Atp. CLP)
8. Regulation (EU) no. 605/2014 of the Commission (VI Atp. CLP)
9. Commission Regulation (EU) 2015/1221 (VII Atp. CLP)
10. Commission Regulation (EU) 2016/918 (VIII Atp. CLP)
11. Commission Regulation (EU) 2016/1179 (IX Atp. CLP)
12. Commission Regulation (EU) 2017/776 (X Atp. CLP)
13. Commission Regulation (EU) 2018/669 (XI Atp. CLP)
14. Commission Regulation (EU) 2018/1480 (XIII Atp. CLP)
15. Commission Regulation (EU) 2019/521 (XII Atp. CLP)
16. The Merck Index. Ed.10
17. Handling Chemical Safety
18. Niosh - Registry of Toxic Effects of Chemical Substances
19. ECHA Agency website

Note for the user:

The information contained in this sheet is based on the knowledge available from us at the date of the latest version. The user must ensure the suitability and completeness of the information in relation to the specific use of the product.

This document must not be interpreted as a guarantee of any specific property of the product.

Since the use of the product does not fall under our direct control, it is the user's obligation to observe the laws and regulations in force on hygiene and safety under his own responsibility. No liability is assumed for improper use.

Provide adequate training to personnel involved in the use of chemicals.

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