



# Safety Data Sheet

according to HPR, Schedule 1

Printing date 03/24/2022

Version 5

Reviewed on 03/24/2022

## 1 Identification

- **Product identifier**
- **Trade name: Zeniplex EP 1**
- **Article number:** 9AB68Q
- **Application of the substance / the mixture** Lubricant
- **Details of the supplier of the safety data sheet**
- **Supplier:**  
Alfa Laval Technologies AB  
SE-221 00 Lund  
Sweden  
+46 46 36 65 00  
info.se@alfalaval.com
- **Information department:**  
For additional questions regarding safety data sheets please contact your local Alfa Laval Sales Company which you find on [www.alfalaval.com](http://www.alfalaval.com) or in safety data sheet under section 16: Other Information
- **Emergency telephone number:**  
Call CHEMTREC  
+1 703-741-5970 / 1-800-424-9300 CCN 844

## 2 Hazard identification

- **Classification of the substance or mixture**  
The product is not classified, according to the Globally Harmonized System (GHS).

- **Label elements**
- **GHS label elements** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



- **HMIS-ratings (scale 0 - 4)**

HEALTH	1	Health = 1
FIRE	1	Fire = 1
REACTIVITY	0	Reactivity = 0

- **Other hazards**  
Inhalation of mist may cause irritation to upper respiratory tract.  
Prolonged and/or repeated skin contact may cause irritation.  
Eye contact can cause minor irritation.



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### 3 Composition/Information on ingredients

- **Chemical characterization: Mixtures**

- **Description:**

CAS: 64742-65-0	Distillates (petroleum), solvent-dewaxed heavy paraffinic	10-30% w/w
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- **Dangerous components:**

CAS: 8042-47-5	White mineral oil, petroleum	7% w/w
CAS: 68649-42-3	Zinc dithiophosphate Skin Irritation - Category 2, H315; Eye Irritation - Category 2A, H319	0-2% w/w *

\* Actual concentration ranges are withheld as a trade secret.

- **Additional information:**

The classification as carcinogens does not apply since the substances above contain less than 3 % DMSO extract as measured by the method IP 346, defined by the Institute of Petroleum, London.

### 4 First-aid measures

- **Description of first aid measures**

- **General information:** Call a poison center/doctor if you feel unwell.

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.

- **After skin contact:**

Wash with water and soap.

If skin irritation continues, consult a doctor.

- **After eye contact:**

Rinse opened eye for several minutes under running water and consult a doctor.

- **After swallowing:**

Rinse out mouth and then drink plenty of water.

Do NOT induce vomiting.

Contact a doctor

- **Most important symptoms and effects, both acute and delayed**

High pressure injection under skin: local necrosis.

Inhalation of mist may cause irritation to upper respiratory tract.

Prolonged and/or repeated skin contact may cause irritation.

Eye contact can cause minor irritation.

- **Indication of any immediate medical attention and special treatment needed**

Product in use under high pressure that has been forced under the skin, is a serious situation that requires IMMEDIATE hospital treatment.

### 5 Fire-fighting measures

- **Extinguishing media**

- **Suitable extinguishing agents:**

Water haze

Foam

Fire-extinguishing powder

Carbon dioxide

Use fire fighting measures that suit the environment.

- **For safety reasons unsuitable extinguishing agents:** Water with full jet

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- **Special hazards arising from the substance or mixture**  
Formation of toxic gases is possible during heating or in case of fire.
- **Advice for firefighters**
- **Protective equipment:**  
Wear self-contained respiratory protective device.  
Wear fully protective suit.
- **Additional information**  
Cool endangered receptacles with water spray.  
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Ensure adequate ventilation  
Do not breathe vapour.  
Avoid skin and eye contact.  
Particular danger of slipping on leaked/spilled product.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Send for recovery or disposal in suitable receptacles.
- **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.

### 7 Handling and storage

- **Handling:**
- **Precautions for safe handling**  
Ensure adequate ventilation  
Do not breathe vapour.  
When using do not eat, drink or smoke.
- **Information about protection against explosions and fires:**  
Keep ignition sources away - Do not smoke.  
Protect against electrostatic charges.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**  
Store in cool, dry conditions in well sealed receptacles.
- **Information about storage in one common storage facility:** Store away from oxidizing agents.
- **Further information about storage conditions:** Store receptacle in a well ventilated area.
- **Specific end use(s)**  
Lubricant  
Professional use only.

### 8 Exposure controls/ Personal protection

- **Additional information about design of technical systems:** Use only in well-ventilated areas.

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**Control parameters****Components with limit values that require monitoring at the workplace:****CAS: 8042-47-5 White mineral oil, petroleum**

EV	STEL: 10 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup>
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**Additional information:** The lists that were valid during the creation were used as basis.**Exposure controls****Personal protective equipment:****General protective and hygienic measures:**

Wash hands before breaks and at the end of work.

Do not carry product impregnated cleaning cloths in trouser pockets.

Take off contaminated clothing.

**Breathing equipment:**

Not necessary if room is well-ventilated.

Use suitable respiratory protective device when high concentrations are present.

**Protection of hands:**

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

**Material of gloves**

Nitrile rubber, NBR

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

**Eye protection:** If eye contact is likely, safety glasses with side shields are recommended.**Body protection:** Wear protective clothing.**Limitation and supervision of exposure into the environment**

Do not allow to enter sewers/ surface or ground water.

Send for recovery or disposal in suitable receptacles.

## 9 Physical and chemical properties

**Information on basic physical and chemical properties****General Information****Appearance:****Form:** Highly viscous**Color:** Brown**Odor:** Mineral-oil-like**Odor threshold:** Not determined.**pH-value:** Not determined.**Change in condition****Melting point/Melting range:** Undetermined.**Boiling point/Boiling range:** Undetermined.

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· <b>Flash point:</b>	232 °C (ASTM D 92 Open Cup)
· <b>Flammability (solid, gaseous):</b>	Not applicable.
· <b>Decomposition temperature:</b>	Not determined.
· <b>Auto igniting:</b>	Product is not selfigniting.
· <b>Danger of explosion:</b>	Product does not present an explosion hazard.
· <b>Explosion limits:</b>	
Lower:	Not determined.
Upper:	Not determined.
· <b>Oxidizing properties</b>	Not applicable.
· <b>Vapor pressure:</b>	<0.1 @ 38 °C
· <b>Density at 20 °C:</b>	≤1 g/cm <sup>3</sup>
· <b>Vapor density</b>	>8 (air = 1)
· <b>Evaporation rate</b>	<1.0 (Ethyl ether = 1)
· <b>Solubility in / Miscibility with Water:</b>	Insoluble.
· <b>Partition coefficient (n-octanol/water):</b>	Not determined.
· <b>Viscosity:</b>	
Dynamic:	Not determined.
Kinematic at 40 °C:	220 mm <sup>2</sup> /s
· <b>Other information</b>	No further relevant information available.

### 10 Stability and reactivity

- **Reactivity** Material is stable under normal conditions.
- **Chemical stability**  
Stable under normal temperature conditions and under recommended usage and storage.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** High temperature
- **Incompatible materials:** Store away from oxidizing agents.
- **Hazardous decomposition products:** None known.

### 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

**CAS: 8042-47-5 White mineral oil, petroleum**

Dermal LD50 &gt;2,000 mg/kg (Rabbit)

**CAS: 68649-42-3 Zinc dithiophosphate**

Oral LD50 2,900 mg/kg (Rat)

Dermal LD50 &gt;2,000 mg/kg (Rabbit)

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- **Primary irritant effect:**
  - **on the skin:** Prolonged and / or repeated skin contact may cause irritation.
  - **on the eye:**  
Contact with eyes may result in mild irritation.  
Irritating effect.
  - **Sensitization:** No sensitizing effects known.
  - **Additional toxicological information:**  
The product is not subject to classification according to internally approved calculation methods for preparations:  
When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.
  - **Carcinogenic categories**
- |   |
|---|
| · <b>IARC (International Agency for Research on Cancer)</b> |
| None of the ingredients is listed.                          |
- |  |
|--|
| · <b>NTP (National Toxicology Program)</b> |
| None of the ingredients is listed.         |
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.

### 12 Ecological information

- **Toxicity**

- **Aquatic toxicity:**

**CAS: 8042-47-5 White mineral oil, petroleum**

LC50	>100 mg/L (Salmon trout) (OECD Test 203)
EC50	>100 mg/L (Daphnia) (OECD TG 202)
NOEC - No observed effect concentration	100 mg/l (Algae) (OECD TG 201)
	1 mg/l (Daphnia)
	1 mg/l (Fish)

**CAS: 68649-42-3 Zinc dithiophosphate**

LC50 (96 h)	4.5 mg/L (Fish)
EC50 (48 h)	1.2 mg/L (Daphnia)
EC50 (72 h)	2.2 mg/L (Algae)
NOEC - No observed effect concentration	1 mg/l (Algae)
	0.4 mg/l (Daphnia)
	1.8 mg/l (Fish)

- **Persistence and degradability**

**CAS: 8042-47-5 White mineral oil, petroleum**

Biodegradability	31 % (No information available)
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- **Behavior in environmental systems:**

- **Bioaccumulative potential**

**CAS: 68649-42-3 Zinc dithiophosphate**

log Pow	0.56
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- **Mobility in soil** The product is not expected to be mobile in soil.

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**Results of PBT and vPvB assessment**

- **PBT:** The product is not, nor contains, a substance that is PBT
- **vPvB:** The product is not, nor contains a substance that is, vPvB.

**Other adverse effects**

Spills may form a film on the water surface. This film may cause physical damage to aquatic organisms and reduce oxygen transfer.

### 13 Disposal considerations

**Waste treatment methods****Recommendation:**

Hand over to hazardous waste disposers.  
Delivery of waste oil to officially authorized collectors only.

**Uncleaned packagings:****Recommendation:**

Packagings that cannot be cleansed are to be disposed of in the same manner as the product.

### 14 Transport information

**UN-Number**

· DOT/TDG, ADR, ADN, IMDG, IATA      Void

**UN proper shipping name**

· DOT/TDG, ADR, ADN, IMDG, IATA      Void

**Transport hazard class(es)**

· DOT, ADR, ADN, IMDG, IATA

· Class      Void

**Packing group**

· DOT/TDG, ADR, IMDG, IATA      Void

**Environmental hazards:**

· Marine pollutant:      No

**Special precautions for user**

Not applicable.

**Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable.

**UN "Model Regulation":**

Void

### 15 Regulatory information

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

No further relevant information available.

**Sara****Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

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**· Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

**· TSCA (Toxic Substances Control Act):**

All components have the value ACTIVE.

**· Canadian substance listings:****· Canadian Domestic Substances List (DSL)**

All ingredients are listed.

**· Canadian Non-Domestic Substances List (NDSL)**

None of the ingredients is listed.

**· Canadian Ingredient Disclosure list (limit 0.1%)**

None of the ingredients is listed.

**· Canadian Ingredient Disclosure list (limit 1%)**

None of the ingredients is listed.

**· GHS label elements** Void**· Hazard pictograms** Void**· Signal word** Void**· Hazard statements** Void**· Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### 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.

**LIMITATION OF LIABILITY**

This document is only intended to be used as guidance as regards the risks of which we are aware that are associated with the product. Every individual who works with the product or in close proximity of it must receive suitable training. Individuals who come into contact with the product must be capable of using their own judgement as regards conditions or methods for handling, storing and using the product. Alfa Laval is not liable for demands, losses or damage of any kind that arise from flaws or deficiencies in this document or from using, handling, storing or disposing of the product unless it can be proven that Alfa Laval has acted in a grossly negligent manner. Beyond what has been agreed upon and specified in writing with Alfa Laval in the individual case, Alfa Laval makes no promises or assumes any liability, including but not limited to implicit guarantees regarding marketability or appropriateness in terms of both the information provided in this document and the product to which the information refers.

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**· Department issuing SDS:** Alfa Laval Corporate Standards & Regulatory Operations**· Contact:**

Please contact your local Alfa Laval Sales Company for further questions.

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• **Date of the latest revision of the safety data sheet** 03/24/2022 / 4

• **Abbreviations and acronyms:**

IMDG: International Maritime Code for Dangerous Goods  
DOT: US Department of Transportation  
IATA: International Air Transport Association  
EINECS: European Inventory of Existing Commercial Chemical Substances  
ELINCS: European List of Notified Chemical Substances

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

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

· \* **Data compared to the previous version altered.**

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