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

1.1. Product identifier

Product code : POWER FREEZE
Trades code : 11.125 - 11.124 - 11.129

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

PRODUCTS FOR REFRIGERATION COMPRESSORS
Sectors of use:
Industrial Manufacturing[SU3], Public domain[SU22]
Product category:
ADDITIVE REFRIGERATING CIRCUITS
Process categories:
PRODUCTS FOR REFRIGERATION COMPRESSORS

Uses advised against
No additional information available

1.3. Details of the supplier of the safety data sheet

Elke srl
Via XXV Aprile, 202 Nichelino 10042 (TO) Italy
T. +39 (0)11 9622412
E. info@elke-ac.com
W. www.elke-ac.com

1.4. Emergency telephone number

Centro Antiveleni Niguarda 02 66101029 (CAV Ospedale Niguarda Ca' Granda -Milano) Centro Antiveleni di Firenze 055 7947819 (CAV Ospedale Careggi - Firenze) Centro Antiveleni di Roma 06 49978000 (CAV Policlinico Umberto I - Roma) Centro Antiveleni di Napoli 081 7472870 (CAV Ospedale Cardarelli - Napoli)

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

2.1.1 Classification according to Regulation (EC) No 1272/2008:

Pictograms:
None

Hazard Class and Category Code(s):
Nonhazardous

Hazard statement Code(s):
Nonhazardous

2.2. Label elements

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

Pictogram, Signal Word Code(s):
None

Hazard statement Code(s):
Nonhazardous

Supplemental Hazard statement Code(s):
EUH210 - Safety data sheet available on request.

Precautionary statements:
Nothing in particular.

Content of VOC ready to use condition: 8,00 %

2.3. Other hazards

The substance / mixture NOT contains substances PBT/vPvB according to Regulation (EC) No 1907/2006, Annex XIII

No information on other hazards

SECTION 3. Composition/information on ingredients

3.1 Substances

Irrilevant

3.2 Mixtures

Refer to paragraph 16 for full text of hazard statements

Substance	Concentration[w/w]	Classification	Index	CAS	EINECS	REACh
propan-2-ol	>= 1 < 5%	Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336 ATE oral = 2.100,0 mg/kg ATE dermal = 2.100,0 mg/kg	603-117-00-0	67-63-0	200-661-7	NR

SECTION 4. First aid measures

4.1. Description of first aid measures

Inhalation:
Air the area. Move immediately the contaminated patient from the area and keep him at rest in a well ventilated area.

If you feel unwell seek medical advice.

Direct contact with skin (of the pure product).:
Wash thoroughly with soap and running water.

Direct contact with eyes (of the pure product).:
Wash immediately and thorougly with running water for at least 10 minutes.

Ingestion:
Not hazardous. It's possible to give activated charcoal in water or liquid paraffin medicine

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

No data available.

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

No data available.

SECTION 5. Firefighting measures

5.1. Extinguishing media

Advised extinguishing agents:
Water spray, CO2, foam, dry chemical, depending on the materials involved in the fire.

Extinguishing means to avoid:
Water jets. Use water jets only to cool the surfaces of the containers exposed to fire.

5.2. Special hazards arising from the substance or mixture

No data available.

5.3. Advice for firefighters

Use protection for the breathing apparatus
Safety helmet and full protective suit.
The spray water can be used to protect the people involved in the extinction
You may also use selfrespirator, especially when working in confined and poorly ventilated area and if you use halogenated extinguishers (Halon 1211 fluobrene, Solkan 123, NAF, etc...)
Keep containers cool with water spray

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel:
Leave the area surrounding the spill or release. Do not smoke
Wear gloves and protective clothing

6.1.2 For emergency responders:
Wear gloves and protective clothing
Eliminate all unguarded flames and possible sources of ignition. No smoking.

Provision of sufficient ventilation.
Evacuate the danger area and, in case, consult an expert.

6.2. Environmental precautions

Contain spill with earth or sand.
If the product has entered a watercourse in sewers or has contaminated soil or vegetation, notify it to the authorities.
Discharge the remains in compliance with the regulations

6.3. Methods and material for containment and cleaning up

6.3.1 For containment:
Recover the product for reuse, if possible, or for removal. Possibly absorb it with inert material.
Prevent it from entering the sewer system.

6.3.2 For cleaning up:
After wiping up, wash with water the area and materials involved

6.3.3 Other information:
Nothing in particular.

6.4. Reference to other sections

Refer to paragraphs 8 and 13 for more information

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Avoid contact and inhalation of vapors
At work do not eat or drink.
See also paragraph 8 below.

7.2. Conditions for safe storage, including any incompatibilities

Keep in original container closed tightly. Do not store in open or unlabeled containers.
Keep containers upright and safe by avoiding the possibility of falls or collisions.
Store in a cool place, away from sources of heat and `direct exposure of sunlight.

7.3. Specific end use(s)

Industrial Manufacturing:
Handle with extreme caution.
Store in a well ventilated place away from heat sources.

Public domain:
Handle with care. Store in a ventilated area and away from heat, keep the container tightly closed.

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Related to contained substances:
propan-2-ol:

Workplaces must be adequately ventilated.
Where possible, install localized aspiration sources and effective general air exchange systems.
If these measures are not sufficient to keep the concentrations of particulate materials and solvent vapors below the exposure limit, it will be necessary to use adequate means of respiratory protection.
Limit values for occupational exposure
PROPAN-2-OLO; CAS No.: 67-63-0

origin: TLV / STEL (EC)
Limit value: 983 mg / m3 / 400 ppm
Version:
origin): TLV / TWA (EC)
Limit value: 492 mg / m3 / 200 ppm

DNEL / DMEL and PNEC values
DNEL / DMEL

Limit value type:
Route of Exposure: DNEL / DMEL (Consumer DNEL, Systemic) (PROPAN-2-OLO; CAS No .: 67-63-0)
Frequency of exposure: Dermal
Limit value: Long-term (repeated)
Limit value type: 319 mg / kg
Route of Exposure: DNEL / DMEL (Consumer DNEL, Systemic) (PROPAN-2-OLO; CAS No .: 67-63-0)
Frequency of exposure: Inhalation
Limit value: Long-term (repeated)
Type of limit value: 89 mg / m3
Route of Exposure: DNEL / DMEL (Consumer DNEL, Systemic) (PROPAN-2-OLO; CAS No .: 67-63-0)
Exposure frequency: Oral
Limit value: Long-term (repeated) - 26 mg / kg
Limit value type: DNEL / DMEL (Worker, Systemic) (PROPAN-2-OLO; CAS No .: 67-63-0)
Route of exposure: Dermal
Exposure frequency: Long-term (repeated)
Limit value: 888 mg / kg
Limit value type: DNEL / DMEL (Worker, Systemic) (PROPAN-2-OLO; CAS No .: 67-63-0)
Route of exposure: Inhalation
Exposure frequency: Long-term (repeated)
Limit value: 500 mg / m3

PNEC
Limit value type: aquatic PNEC, fresh water (PROPAN-2-OLO; CAS No .: 67-63-0)
Limit value: 140.9 mg / l
Limit value type: Aquatic PNEC, periodic release (PROPAN-2-OLO; CAS No .: 67-63-0)
Limit value: 140.9 mg / l
Limit value type: aquatic PNEC, sea water (PROPAN-2-OLO; CAS No .: 67-63-0)
Limit value: 140.9 mg / l
Limit value type: PNEC sediment, fresh water (PROPAN-2-OLO; CAS No .: 67-63-0)
Limit value: 552 mg / kg
Limit value type: PNEC sediment, sea water (PROPAN-2-OLO; CAS No .: 67-63-0)
Limit value: 552 mg / kg
Limit value type: PNEC soil (PROPAN-2-OLO; CAS No .: 67-63-0)
Limit value: 28 mg / kg
Limit value type: PNEC Secondary poisoning (PROPAN-2-OLO; CAS No .: 67-63-0)
Limit value: 160 mg / kg
Limit value type: PNEC sewage treatment plant (STP) (PROPAN-2-OLO; CAS No .: 67-63-0)
Limit value: 2251 mg / l

8.2. Exposure controls

Appropriate engineering controls:
Industrial Manufacturing:
No specific monitoring foreseen

Public domain:
No specific monitoring foreseen

Individual protection measures:

(a) Eye / face protection
Not needed for normal use.

(b) Skin protection

(i) Hand protection
Not needed for normal use.

(ii) Other
Wear normal work clothing.

(c) Respiratory protection
Not needed for normal use.

(d) Thermal hazards
No hazard to report

Environmental exposure controls:
Use according to good working practices to avoid pollution into the environment.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical and chemical properties	Value	Determination method
Appearance	Clear liquid	
Colour	Typical	
Odour	Typical	
Odour threshold	not determined	
pH	irrelevant	
Melting point/freezing point	not determined	
Initial boiling point and boiling range	not determined	
Flash point	>60 °C	ASTM D92
Evaporation rate	irrelevant	
Flammability (solid, gas)	not determined	
Upper/lower flammability or explosive limits	not determined	
Vapour pressure	not determined	
Vapour density	not determined	

Physical and chemical properties	Value	Determination method
Relative density	0,85 - 1,000 Kg/dm3	
Solubility(ies)	Liposolubile	
Water solubility	Insolubile	
Partition coefficient: n-octanol/water	not determined	
Auto-ignition temperature	not determined	
Decomposition temperature	not determined	
Viscosity	> 40 cSt a 40 °C	
Explosive properties	not explosive	
Oxidising properties	non-oxidizing	

9.2. Other information

Content of VOC ready to use condition: 8,00 %

SECTION 10. Stability and reactivity

10.1. Reactivity

No reactivity hazards

10.2. Chemical stability

No hazardous reaction when handled and stored according to provisions.

10.3. Possibility of hazardous reactions

There are no hazardous reactions

10.4. Conditions to avoid

Nothing to report

10.5. Incompatible materials

Nothing in particular.

10.6. Hazardous decomposition products

Does not decompose when used for intended uses.

SECTION 11. Toxicological information

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

ATE(mix) oral = ∞
ATE(mix) dermal = ∞
ATE(mix) inhal = ∞

(a) acute toxicity: based on available data, the classification criteria are not met.
(b) skincorrosion/irritation: based on available data, the classification criteria are not met.
(c) serious eye damage/irritation: based on available data, the classification criteria are not met.
(d) respiratoryorskinsensitisation: based on available data, the classification criteria are not met.
(e) germ cell mutagenicity: based on available data, the classification criteria are not met.
(f) carcinogenicity: based on available data, the classification criteria are not met.
(g) eproductivetoxicity: based on available data, the classification criteria are not met.
(h) specific target organ toxicity (STOT) single exposure: based on available data, the classification criteria are not met.
(i) specific target organ toxicity (STOT) repeated exposurebased on available data, the classification criteria are not met.
(j) aspiration hazard: based on available data, the classification criteria are not met.

Related to contained substances:
propan-2-ol:
ROUTES OF EXPOSURE:The substance can be absorbed into the body by inhalation of its vapour.
INHALATION RISK:A harmful contamination of the air will be reached rather slowly on evaporation of this substance at 20°C; on spraying or dispersing, however, much faster.
EFFECTS OF SHORT-TERM EXPOSURE:The substance is irritating to the eyes and the respiratory tract The substance may cause effects on the central nervous system , resulting in depression. Exposure far above the OEL may result in unconsciousness.
EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:The liquid defats the skin.
LD50 (rat) Oral (mg/kg body weight) = 2100
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 2100

11.2. Information on other hazards

No data available.

SECTION 12. Ecological information

12.1. Toxicity

Related to contained substances:
propan-2-ol:
Ecotoxicity: Ecotoxicity in water (LC50): 100000 mg/l 96 hours [Fathead Minnow]. 64000 mg/l 96 hours [Fathead Minnow].
BOD5 and COD: Not available.
Products of Biodegradation:
Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
Toxicity of the Products of Biodegradation: The product itself and its products of degradation are not toxic.
Special Remarks on the Products of Biodegradation: Not available.

Use according to good working practices to avoid pollution into the environment.

12.2. Persistence and degradability

No data available.

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

No PBT/vPvB ingredient is present

12.6. Endocrine disrupting properties

No data available.

12.7. Other adverse effects

No adverse effects

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Do not reuse empty containers. Dispose of them in accordance with the regulations in force. Any remaining product should be disposed of according to applicable regulations by addressing to authorized companies.
Recover if possible. Operate according to local or national regulations

SECTION 14. Transport information

14.1. UN number or ID number

Not included in the scope of application regulations concerning the transport of dangerous goods: by road (ADR); by rail (RID); by air (ICAO / IATA); by sea (IMDG).

14.2. UN proper shipping name

None

14.3. Transport hazard class(es)

None

14.4. Packing group

None

14.5. Environmental hazards

None

14.6. Special precautions for user

No data available.

14.7. Maritime transport in bulk according to IMO instruments

It is not intended to carry bulk

SECTION 15. Regulatory information

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

No data available.

15.2. Chemical safety assessment

No chemical safety assessment was carried out by the supplier

SECTION 16. Other information

16.1. Other information

Description of the hazard statements exposed to point 3
H225 = Highly flammable liquid and vapour.
H319 = Causes serious eye irritation.
H336 = May cause drowsiness or dizziness.

Classification based on data of all mixture components

GENERAL BIBLIOGRAPHY:
- Council Regulation (EC) 1907/2006 of the European Parliament (REACH)
- Regulation (EC) 1272/2008 of the European Parliament (CLP) and subsequent updates
- Council Regulation (EC) no 758/2013 of the European Parliament
- Regulation (EC) no 2020/878 of the European Parliament
- Regulation (EC) No 528/2012 European Parliament and subsequent updates
- Council Regulation (EC) 648/2004 of the European Parliament and subsequent updates
- The Merck Index
- Handling Chemical Safety
- Niosh Registry of Toxic Effects of Chemical Substances
- INRS - Fiche Toxicologique
- Patty-Industrial Hygiene and Toxicology
- N.I. Sax-Dangerous properties of Industrial Materials-7 Ed., 1989

Note to the user:
the information in this tab are based on knowledge available to us on the date of the latest version.
The user must ensure the fitness and completeness of the information in relation to the specific use of the product.
You should not interpret it as a guarantee of any specific property of the product.
For the use of the product does not fall under our direct control, the obligation of the user to observe under their own liability laws and regulations on hygiene and safety. Do not assume liability for improper use.

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