

SAFETY DATA SHEET FREEZER 200ML WITH HFO

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name FREEZER 200ML WITH HFO
Product No. FREH, EFREH200, ZE

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

Identified uses Office Equipment Cleaning Product
Uses advised against At this moment in time we do not have information on use restrictions. They will be included in this safety data sheet when available

1.3. Details of the supplier of the safety data sheet

Supplier ELECTROLUBE. A division of HK
 WENTWORTH LTD
 ASHBY PARK, COALFIELD WAY,
 ASHBY DE LA ZOUCH, LEICESTERSHIRE
 LE65 1JR
 UNITED KINGDOM
 +44 (0)1530 419600
 +44 (0)1530 416640
 info@hkw.co.uk

1.4. Emergency telephone number

+44 (0)1530 419600 between 8.30am - 5.00pm GMT Mon – Fri

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical and Chemical Hazards	Not classified.
Human health	Not classified.
Environment	Not classified.

Classification (67/548/EEC)

Not classified.

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

Human health

Contact with liquefied gas might cause frostbites, in some cases with tissue damage.

Physical and Chemical Hazards

Aerosol containers can explode when heated, due to excessive pressure build-up. When sprayed on a naked flame or any incandescent material the aerosol vapours can be ignited.

2.2. Label elements

Label In Accordance With (EC) No. 1272/2008

No pictogram required.

Precautionary Statements

P102	Keep out of reach of children.
P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P251	Pressurized container: Do not pierce or burn, even after use.
P260	Do not breathe vapour/spray.
P410+412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122°F.

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2.3. Other hazards

Not Classified as PBT/vPvB by current EU criteria. Contact with liquid may cause cold burns / frostbite.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

TRANS-1,3,3,3-TETRAFLUOROPROP-1-ENE		80-100%
CAS-No.: 29118-24-9	EC No.: 471-480-0	
Classification (EC 1272/2008) Press. Gas, Liquefied - H280	Classification (67/548/EEC) Not classified.	

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

Composition Comments

Ingredients not listed are classified as non-hazardous or at a concentration below reportable levels.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation

Move the exposed person to fresh air at once. Keep the affected person warm and at rest. Get prompt medical attention.

Ingestion

DO NOT INDUCE VOMITING! Rinse mouth thoroughly.

Skin contact

Wash the skin immediately with soap and water. Get medical attention if any discomfort continues. Contact with gas may cause frostbite

Eye contact

Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention.

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

Inhalation

Vapours may cause headache, fatigue, dizziness and nausea.

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

Treat Symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

This product is not flammable. Use fire-extinguishing media appropriate for surrounding materials.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products

Fire creates: Hydrogen fluoride (HF).

Unusual Fire & Explosion Hazards

Aerosol cans may explode in a fire.

Specific hazards

Vapours are heavier than air and may travel along the floor and in the bottom of containers. Vapours may be ignited by a spark, a hot surface or an ember.

5.3. Advice for firefighters

Special Fire Fighting Procedures

Move container from fire area if it can be done without risk.

Protective equipment for fire-fighters

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

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SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

Not relevant considering the small amounts used.

6.3. Methods and material for containment and cleaning up

Stop leak if possible without risk. DO NOT touch spilled material! Ventilate well.

6.4. Reference to other sections

See section 11 for additional information on health hazards. Wear protective clothing as described in Section 8 of this safety data sheet.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Ventilate well, avoid breathing vapours. Use approved respirator if air contamination is above accepted level.

7.2. Conditions for safe storage, including any incompatibilities

Store at moderate temperatures in dry, well ventilated area.

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Name	STD	TWA - 8 Hrs		STEL - 15 Min		Notes
TRANS-1,3,3,3-TETRAFLUOROPROP-1-ENE	SUP	1000 ppm				

8.2. Exposure controls

Process conditions

Use engineering controls to reduce air contamination to permissible exposure level. Provide eyewash station.

Engineering measures

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded.

Respiratory equipment

In case of inadequate ventilation and work of brief duration, use suitable respiratory equipment. Use respiratory equipment with gas filter, type A2. EN14387

Hand protection

Protective gloves must be used if there is a risk of direct contact or splash. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material. Use protective gloves made of: Viton rubber (fluor rubber). Gloves should conform to EN374

Eye protection

Wear approved chemical safety goggles where eye exposure is reasonably probable. EN166

Other Protection

Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact.

Hygiene measures

Wash hands at the end of each work shift and before eating, smoking and using the toilet. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke. DO NOT SMOKE IN WORK AREA!

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

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Appearance	Aerosol. Liquefied Gas
Colour	Colourless.
Odour	Slight odour. Characteristic.
Initial boiling point and boiling range (°C)	-19 (-2.2 F)
Relative density	1.12 @ 21.1 °C (69.98 F)
Vapour pressure	0.4192 kPa @ 20 °C (68 F)
Evaporation rate	4
Flash point (°C)	Not applicable. does not flash
Auto Ignition Temperature (°C)	368 (694 F)

9.2. Other information

Volatility Description Highly volatile.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No information available

10.2. Chemical stability

Stable under normal temperature conditions.

10.3. Possibility of hazardous reactions

Not available.

Hazardous Polymerisation

Will not polymerise.

10.4. Conditions to avoid

Avoid heat, flames and other sources of ignition. Avoid contact with acids and alkalis.

10.5. Incompatible materials

Materials To Avoid

Alkali metals.

10.6. Hazardous decomposition products

Fire or high temperatures create: Carbon monoxide (CO). Hydrogen fluoride (HF). Carbonyl fluoride

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Toxic Conc. - LC 50

>207000 ppm/4h (inh-rat)

Other Health Effects

This substance has no evidence of carcinogenic properties.

Acute toxicity:

Acute Toxicity (Oral LD50)

Not applicable.

Acute Toxicity (Dermal LD50)

No information available.

Acute Toxicity (Inhalation LC50)

> 965 mg/l (vapours) Rat 4 hours

General information

No specific health warnings noted.

Inhalation

High concentrations of vapours may irritate respiratory system and lead to headache, fatigue, nausea and vomiting.

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Ingestion

DO NOT INDUCE VOMITING! Rinse mouth thoroughly.

Skin contact

Wash the skin immediately with soap and water. Get medical attention if any discomfort continues.

Eye contact

Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention.

Health Warnings

Contact with liquid form may cause frostbite.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Acute Toxicity - Fish

NOEC 96 hours > 117 mg/l *Cyprinus carpio* (Common carp)

EC 50, 48 Hrs, *Daphnia*, mg/l >160

Acute Toxicity - Aquatic Invertebrates

EC50 48 hours > 160 mg/l *Daphnia magna*

Acute Toxicity - Aquatic Plants

NOEC 72 hours > 170 mg/l *Selenastrum capricornutum*

12.2. Persistence and degradability

Degradability

The product is not readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential

No data available on bioaccumulation.

12.4. Mobility in soil

Mobility:

The product contains volatile organic compounds (VOC) which will evaporate easily from all surfaces.

12.5. Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB substances.

12.6. Other adverse effects

The product contains volatile, organic compounds which have a photochemical ozone creation potential.

SECTION 13: DISPOSAL CONSIDERATIONS

General information

Do not puncture or incinerate even when empty.

13.1. Waste treatment methods

Empty containers must not be burned because of explosion hazard. Dispose of waste and residues in accordance with local authority requirements.

SECTION 14: TRANSPORT INFORMATION

General

This product is packed in accordance with the Limited Quantity Provisions of CDGCPL2, ADR and IMDG. These provisions allow transport of aerosols of less than 1litre packed in cartons of less than 30kg gross to be exempt from control providing that they are labelled in accordance with the requirements of these regulations to show that they are being transported as Limited Quantities. Aerosols not so packed must show the following

14.1. UN number

UN No. (ADR/RID/ADN)	1950
UN No. (IMDG)	1950
UN No. (ICAO)	1950

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14.2. UN proper shipping name

Proper Shipping Name AEROSOLS

14.3. Transport hazard class(es)

ADR/RID/ADN Class 2.2
ADR/RID/ADN Class Class 2: Gases
ADR Label No. 2.2
IMDG Class 2.2
ICAO Class/Division 2.2

Transport Labels



14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant

No.

14.6. Special precautions for user

EMS F-D, S-U
Tunnel Restriction Code (E)

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

Not applicable.

SECTION 15: REGULATORY INFORMATION

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

Statutory Instruments

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716). Control of Substances Hazardous to Health.

Guidance Notes

Workplace Exposure Limits EH40.

EU Legislation

Commission Directive 2000/39/EC of 8 June 2000 establishing a first list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

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, including amendments.

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 with amendments.

Authorisations (Title VII Regulation 1907/2006)

No specific authorisations are noted for this product.

Restrictions (Title VIII Regulation 1907/2006)

No specific restrictions of use are noted for this product.

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15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

Issued By	Helen O'Reilly
Revision Date	APRIL 2013
Revision	2
SDS No.	13180
Risk Phrases In Full	
NC	Not classified.
Hazard Statements In Full	
H280	Contains gas under pressure; may explode if heated.

Disclaimer

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.

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