



MATERIAL SAFETY DATA SHEET

EASI FREEZE



According to Regulation (EC) No 1907/2006, Annex II, as amended. Commission Regulation (EU) No 2015/830 of 28 May 2015.

Revision: 1 Supersedes date: 04/10/2017

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

1.1. Product identifier

Product name Excel Industries Easi Freeze
Container size 205ml

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

Identified uses Freezing Spray

1.3. Details of the supplier of the safety data sheet

Supplier Excel Industries
Coolmine Industrial Estate
Clonsilla Road
Dublin 15
Tel: 00 353 1811 8701
Fax: 00 353 1811 8785

1.4. Emergency telephone number

Emergency telephone Excel Industries: 00 353 1811 8701 (Mon-Fri: 09:00-17:00)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Press. Gas (Liq.) - H280
Health hazards Not Classified
Environmental hazards Not Classified

2.2. Label elements

Pictogram



Signal word Warning

Hazard statements H280 Contains gas under pressure; may explode if heated.

Precautionary statements P102 Keep out of reach of children.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P251 Do not pierce or burn, even after use.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
P501 Dispose of contents/ container in accordance with national regulations.

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB. Gas or vapour displaces oxygen available for breathing (asphyxiant).

SECTION 3: Composition/information on ingredients

3.2. Mixtures



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TRANS-1,3,3,3 TETRAFLUOROPROP-1-ENE (HFO-1234ze)

60-100%

CAS number: 29118-24-9

EC number: 471-480-0

Classification

Press. Gas (Liq.) - H280

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

Composition comments HFO 1234ze is not flammable at temperatures lower than 30°C

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen.
Ingestion	Ingestion is not considered a potential route of exposure.
Skin contact	Thaw affected areas with water. Remove contaminated clothing. Caution: clothing may adhere to the skin in the case of freeze burns. After contact with skin, wash immediately with plenty of warm water. If irritation or blistering occur obtain medical attention.
Eye contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention. Show this Safety Data Sheet to the medical personnel.

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

General information	In high concentrations may cause asphyxiation. Contact of tissue with liquid or vapour may cause freeze burns.
Inhalation	At high concentrations, vapour can act as an asphyxiant.
Ingestion	Due to the physical nature of this material it is unlikely that swallowing will occur.
Skin contact	Contact with liquid or vapour can cause freeze burns.
Eye contact	Contact with liquid or vapour can cause freeze burns.

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

Notes for the doctor	Symptomatic treatment and supportive therapy as indicated. Adrenalin and similar sympathomimetic drugs should be avoided following exposure as cardiac arrhythmia may result with possible subsequent cardiac arrest.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	HFO 1234ze is not flammable at temperatures lower than 30°C Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Use fire-extinguishing media suitable for the surrounding fire.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards	Containers can burst violently when heated, due to excess pressure build-up. HFO 1234ze is not flammable at temperatures lower than 30°C
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Hazardous combustion products Oxides of carbon. Thermal decomposition will evolve very toxic and corrosive vapours (hydrogen fluoride).

5.3. Advice for firefighters

Protective actions during firefighting Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk.

Special protective equipment for firefighters Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions For personal protection, see Section 8.

6.2. Environmental precautions

Environmental precautions Product will vapourise into atmosphere.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up VENTILATE/EVAPORATE.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. For waste disposal, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Avoid contact between the liquid and skin and eyes as freeze burns may occur.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Aerosol cans: Must not be exposed to direct sunlight or temperatures above 50°C. Store in a cool and well-ventilated place.

7.3. Specific end use(s)

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

Occupational exposure limits

No exposure limits known for ingredient(s).

8.2. Exposure controls

Protective equipment



Appropriate engineering controls Gas or vapour displaces oxygen available for breathing (asphyxiant). Provide adequate ventilation.

Eye/face protection No specific eye protection noted, but safety glasses may still be advisable.

Hand protection Wear cold insulating gloves

Other skin and body protection Wear apron or protective clothing in case of contact.



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Hygiene measures	Ensure suitable ventilation of area. No specific hygiene procedures recommended but good personal hygiene practices should always be observed when working with chemical products.
Respiratory protection	Not usually necessary under normal working conditions.
Thermal hazards	Extremely cold, can cause frost bite.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquefied Gas
Colour	Colourless.
Odour	Slightly ether like
Melting point	No information available.
Initial boiling point and range	-19°C
Vapour pressure	4,192 hPa @ 20°C 10,998 hPa @ 54.4°C
Relative density	1.17 @ 21.1°C
Solubility(ies)	Slightly soluble in water.
Auto-ignition temperature	368°C

9.2. Other information

Other information	Not available.
Volatile organic compound	This product contains a maximum VOC content of 100 %.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	There are no known reactivity hazards associated with this product.
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10.2. Chemical stability

Stability	Stable at normal ambient temperatures and when used as recommended.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	No known hazardous reactions if stored under normal conditions. Will not polymerise.
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10.4. Conditions to avoid

Conditions to avoid	Avoid exposing aerosol containers to high temperatures or direct sunlight.
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10.5. Incompatible materials

Materials to avoid	Alkali metals. Alkaline earth metals. Finely divided metals, magnesium and alloys containing more than 2% magnesium.
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10.6. Hazardous decomposition products

Hazardous decomposition products	Hydrogen fluoride (HF).
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SECTION 11: Toxicological information

11.1. Information on toxicological effects



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Inhalation	High exposures may cause an abnormal heart rhythm and prove suddenly fatal. Very high atmospheric concentrations may cause anaesthetic effects and asphyxiation.
Skin contact	Liquid splashes or spray may cause freeze burns.
Eye contact	Liquid splashes or spray may cause freeze burns.
Route of exposure	Inhalation

SECTION 12: Ecological information

Ecotoxicity The product is not expected to be hazardous to the environment.

12.1. Toxicity

Toxicity Not regarded as dangerous for the environment

Ecological information on ingredients.

TRANS-1,3,3,3 TETRAFLUOROPROP-1-ENE (HFO-1234ze)

Acute aquatic toxicity

Acute toxicity - fish NOEC, 96 hour: 117 mg/l, Cyprinus carpio (Common carp)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hour: 117 mg/l, Daphnia magna

Acute toxicity - aquatic plants NOEC, 72 hour: 170 mg/l, Selenastrum capricornutum

12.2. Persistence and degradability

Persistence and degradability The product is not biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential The product is not bioaccumulating.

12.4. Mobility in soil

Mobility Not applicable.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This substance is not identified as a PBT substance.

12.6. Other adverse effects

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Do not puncture or incinerate, even when empty. Ensure containers are empty before discarding (explosion risk). Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

Disposal methods Ensure container is empty and dispose of in accordance with Local Authority regulations. Do not pierce or incinerate even when container is empty.

Waste class Full or Partially Empty Aerosol: 16 05 04, Empty Aerosol: 15 01 10 (Containing hazardous residues), Empty Aerosol: 15 01 04 (No hazardous residues).

SECTION 14: Transport information

14.1. UN number



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

14.2. UN proper shipping name

Proper shipping name (ADR/RID) AEROSOLS
Proper shipping name (IMDG) AEROSOLS
Proper shipping name (ICAO) AEROSOLS
Proper shipping name (ADN) AEROSOLS

14.3. Transport hazard class(es)

ADR/RID class 2.2
ADR/RID classification code 5A
ADR/RID label 2.2
IMDG class 2.2
ICAO class/division 2.2
ADN class 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
ADR transport category 3
Tunnel restriction code (E)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

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



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National regulations

The Control of Substances Hazardous to Health Regulations 2002 (SI 2002 No. 2677) (as amended).
Health and Safety at Work etc. Act 1974 (as amended).
The Aerosol Dispensers Regulations 2009 (SI 2009 No. 2824).

EU legislation

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 (as amended).
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) (as amended).

Authorisations (Title VII Regulation 1907/2006)

No specific authorisations are known for this product.

Restrictions (Title VIII Regulation 1907/2006)

No specific restrictions on use are known for this product.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Issued by	Technical Service Manager
Revision	1
Supersedes date	04/10/2017
SDS number	21177
Risk phrases in full	Not classified.
Hazard statements in full	H280 Contains gas under pressure; may explode if heated.

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.