

**MATERIAL SAFETY DATA SHEET****GAS LEAK DETECTION SPRAY**

Supersedes date: 02/10/2017

Revision: 1

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

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Product name	Excel Industries Gas Leak Detector
Container size	400ml
REACH registration notes	All chemicals used in this product have been registered under REACH where required.

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

Identified uses	Gas Leak Detector
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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
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1.4. Emergency telephone number

Emergency telephone	Excel Industries: 00 353 1811 8701 (Mon-Fri: 09:00-17:00)
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SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Classification (EC 1272/2008)**

Physical hazards	Aerosol 3 - H229
Health hazards	Eye Irrit. 2 - H319
Environmental hazards	Aquatic Chronic 3 - H412

2.2. Label elements**Pictogram**

Signal word	Warning
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Hazard statements	H229 Pressurised container: may burst if heated. H319 Causes serious eye irritation. H412 Harmful to aquatic life with long lasting effects.
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**MATERIAL SAFETY DATA SHEET****GAS LEAK DETECTION SPRAY****Precautionary statements**

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.
P264 Wash contaminated skin thoroughly after handling.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 If eye irritation persists: Get medical advice/ attention.
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.

Supplemental label information

EUH208 Contains preservative. May produce an allergic reaction.

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB. Overexposure to organic solvents may depress the central nervous system, causing dizziness and intoxication and, at very high concentrations, unconsciousness and death.

SECTION 3: Composition/information on ingredients**3.2. Mixtures**

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

5-10%

CAS number: 29118-24-9

EC number: 471-480-0

Classification

Press. Gas (Liq.) - H280

Anionic surfactant

1-5%

CAS number: 8051-30-7

Classification

Skin Irrit. 2 - H315

Eye Dam. 1 - H318

Aquatic Chronic 2 - H411

Amphoteric Surfactant

<1%

CAS number: 137-16-6

EC number: 205-281-5

Classification

Acute Tox. 4 - H332

Eye Irrit. 2 - H319

Classification (67/548/EEC or 1999/45/EC)

Xi;R36.

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1,2-BENZISOTHIAZOL-3(2H)-ONE

<1%

CAS number: 2634-33-5

EC number: 220-120-9

M factor (Acute) = 1

Classification

Acute Tox. 4 - H302

Skin Irrit. 2 - H315

Eye Dam. 1 - H318

Skin Sens. 1 - H317

Aquatic Acute 1 - H400

Classification (67/548/EEC or 1999/45/EC)

Xn;R22 R43 Xi;R38,R41 N;R50

BRONOPOL (INN)

<1%

CAS number: 52-51-7

EC number: 200-143-0

REACH registration number: 01-2119980938-15-0000

M factor (Acute) = 1

Classification

Acute Tox. 4 - H302

Acute Tox. 4 - H312

Skin Irrit. 2 - H315

Eye Dam. 1 - H318

STOT SE 3 - H335

Aquatic Acute 1 - H400

Aquatic Chronic 2 - H411

Classification (67/548/EEC or 1999/45/EC)

Xn;R21/22 Xi;R37/38,R41 N;R50

ISOCIL

<1%

CAS number: 2682-20-4

EC number: 220-239-6

M factor (Acute) = 1

Classification

Acute Tox. 3 - H301

Acute Tox. 3 - H311

Acute Tox. 2 - H330

Skin Corr. 1B - H314

Eye Dam. 1 - H318

Skin Sens. 1 - H317

Aquatic Acute 1 - H400

Aquatic Chronic 2 - H411

Classification (67/548/EEC or 1999/45/EC)

T;R23/24/25. C;R34. N;R50. R43.

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

Move affected person to fresh air at once. Get medical attention if any discomfort continues.

Ingestion

Due to the small packaging, the risk of ingestion is minimal.

Skin contact

Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if irritation persists after washing.



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Eye contact Rinse immediately with plenty of water. Continue to rinse for at least 10 minutes. Get medical attention if any discomfort continues.

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

Inhalation Vapours in high concentrations are anaesthetic. Symptoms following overexposure may include the following: Headache. Fatigue. Dizziness. Central nervous system depression.

Ingestion May cause discomfort if swallowed.

Skin contact Prolonged skin contact may cause redness and irritation.

Eye contact There may be irritation and redness.

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

Notes for the doctor Show this safety data sheet to the doctor in attendance.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. The product is not flammable. 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

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. Do not breathe vapour/spray. Avoid contact with skin and eyes.

For non-emergency personnel Keep upwind to avoid inhalation of gases, vapours, fumes and smoke.

6.2. Environmental precautions

Environmental precautions Not considered to be a significant hazard due to the small quantities used.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Stop leak if safe to do so. Provide adequate ventilation. Do not allow material to enter confined spaces, due to the risk of explosion. Leave small quantities to evaporate, if safe to do so.

6.4. Reference to other sections

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

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions	Do not handle until all safety precautions have been read and understood. Spray will evaporate and cool rapidly and may cause frostbite or cold burns if in contact with skin.
Advice on general occupational hygiene	Persons susceptible to allergic reactions should not handle this product. Persons with impaired lung function should not handle this product.. Do not eat, drink or smoke when using this product. Provide eyewash station. Clean equipment and the work area every day. Good personal hygiene procedures should be implemented.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions	Store at temperatures between 5°C and 25°C. Do not expose to temperatures exceeding 50°C/122°F. Protect from sunlight. Do not pierce or burn, even after use.
Storage class	Compressed gas storage.

7.3. Specific end use(s)

Specific end use(s)	The identified uses for this product are detailed in Section 1.2.
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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

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses.

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. Wear protective gloves made of the following material: Nitrile rubber.

Other skin and body protection

For the greatest protection, clothing should include anti-static overalls, boots and gloves.

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

If ventilation is inadequate, suitable respiratory protection must be worn.

Thermal hazards

Spray will evaporate and cool rapidly and may cause frostbite or cold burns if in contact with skin.

Environmental exposure controls

Residues and empty containers should be taken care of as hazardous waste according to local and national provisions.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Aerosol.
Colour	Colourless.
Odour	Slight. Ether.
Odour threshold	No information available.
pH	No information available.
Melting point	No information available.
Initial boiling point and range	100°C @ 760 mm Hg Boiling point of base liquid for liquid base.
Flash point	Not applicable.
Evaporation rate	No information available.
Evaporation factor	No information available.
Flammability (solid, gas)	Not considered to be explosive.
Upper/lower flammability or explosive limits	Not applicable.
Other flammability	Not available.
Vapour density	No information available.
Relative density	1.02 @ @ 20°C for liquid base.
Bulk density	No information available.
Solubility(ies)	Soluble in water.
Viscosity	<10 mPa s @ 20°C for liquid base.

9.2. Other information

Other information	Not available.
Volatile organic compound	This product contains a maximum VOC content of 6 %.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	Stable under recommended transport or storage conditions.
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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 heat.
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10.5. Incompatible materials

Materials to avoid	Strong oxidising agents. Strong acids.
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10.6 Hazardous decomposition products

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Hazardous decomposition products

Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Inhalation	High exposures may cause an abnormal heart rhythm and prove suddenly fatal. Very high atmospheric concentrations may cause anaesthetic effects and asphyxiation.
Ingestion	May cause discomfort if swallowed.
Skin contact	Prolonged and frequent contact may cause redness and irritation.
Eye contact	There maybe irritation and redness.
Acute and chronic health hazards	Vapours in high concentrations are narcotic. Prolonged inhalation of high concentrations may damage respiratory system.
Route of exposure	Inhalation Ingestion

Toxicological information on ingredients.

Amphoteric Surfactant

Acute toxicity - inhalation

ATE inhalation (vapours mg/l) 11.0

ISOCIL

Acute toxicity - inhalation

ATE inhalation (vapours mg/l) 0.5

SECTION 12: Ecological information

Ecotoxicity Harmful to aquatic life with long lasting effects.

12.1. Toxicity

Toxicity Contains a substance which is very toxic to aquatic organisms, may cause long term adverse effects in the aquatic 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

1,2-BENZISOTHIAZOL-3(2H)-ONE

Acute aquatic toxicity

LE(C)₅₀ 0.1 < L(E)C₅₀ ≤ 1

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M factor (Acute) 1

BRONOPOL (INN)**Acute aquatic toxicity**LE(C)₅₀ 0.1 < L(E)C₅₀ ≤ 1

M factor (Acute) 1

ISOCIL**Acute aquatic toxicity**LE(C)₅₀ 0.1 < L(E)C₅₀ ≤ 1

M factor (Acute) 1

12.2. Persistence and degradability**Persistence and degradability** The product is biodegradable.**12.3. Bioaccumulative potential****Bioaccumulative potential** The product is not bioaccumulating.**12.4. Mobility in soil****Mobility** Readily absorbed into soil.**12.5. Results of PBT and vPvB assessment****Results of PBT and vPvB assessment** This product does not contain any substances classified as PBT or vPvB.**12.6. Other adverse effects****Other adverse effects** Negligible ecotoxicity**SECTION 13: Disposal considerations****13.1. Waste treatment methods****General information** Do not puncture or incinerate, even when empty. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Best to recover and recycle. If this is not possible, destruction is to be in an approved facility which is equipped to absorb and neutralise acid gases and other toxic processing products.**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**

UN No. (ADR/RID) 1950

UN No. (IMDG) 1950

UN No. (ICAO) 1950

UN No. (ADN) 1950

14.2. UN proper shipping name

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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

IMDG Code segregation group SG69

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 Not applicable.

Annex II of MARPOL 73/78
and the IBC Code

SECTION 15: Regulatory information

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

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).

**MATERIAL SAFETY DATA SHEET****GAS LEAK DETECTION SPRAY****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**Classification procedures
according to Regulation (EC)
1272/2008**

Aerosol 3 - H229: Weight of evidence. Eye Irrit. 2 - H319: Calculation method. Aquatic Chronic 3 - H412: Calculation method.

Issued by

Technical Department

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1

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21174

Hazard statements in full

H229 Pressurised container: may burst if heated.
H280 Contains gas under pressure; may explode if heated.
H301 Toxic if swallowed.
H302 Harmful if swallowed.
H311 Toxic in contact with skin.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H330 Fatal if inhaled.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H400 Very toxic to aquatic life.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

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.