

SECTION 1: Identification

1.1. Identification

Product form : Mixture
 Trade name : EcoBurner Fuel

1.2. Recommended use and restrictions on use

Use of the substance/mixture : For use ONLY in re-fill of EcoBurner, as directed by EcoBurner Ltd. Directions for use provided in "EcoBurner Quick Start Guide". Use only with approved EcoBurner Devices.
 Use of the substance/mixture : Fuel
 Restrictions on use : All other uses not recommended above

1.3. Supplier

Supplier
 EcoBurner Ltd.
 Unit 5 Airside, Gulf Stream Avenue,
 Airport Business Park, Waterford,
 X91 RF20 Ireland
 T +353 (0)51 353806
 F +353 (0)51 364067
 info@ecoburner.com
 www.ecoburner.com

1.4. Emergency telephone number

Emergency number : +1 202 464 2554 (Carechem)

SECTION 2: Hazard(s) identification


2.1. Classification of the substance or mixture

GHS US classification

Flammable aerosol Category 1	H222	Extremely flammable aerosol
Gases under pressure Compressed gas	H280	Contains gas under pressure; may explode if heated
Full text of H statements : see section 16		

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US) : 

Signal word (GHS US) : Danger

Hazard statements (GHS US) : H222 - Extremely flammable aerosol
 H280 - Contains gas under pressure; may explode if heated

Precautionary statements (GHS US) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P211 - Do not spray on an open flame or other ignition source.
 P251 - Pressurized container: Do not pierce or burn, even after use.
 P403 - Store in a well-ventilated place.
 P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

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2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

No additional information available

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Comments : The exact percentage (concentration) in the composition has been withheld as a trade secret in accordance with paragraph (i) of § 1910.1200

Name	Product identifier	%	GHS US classification
Butane	CAS-No.: 106-97-8	≥ 70 – ≤ 90	Flam. Gas 1, H220
Propane	CAS-No.: 74-98-6	≥ 10 – ≤ 30	Flam. Gas 1, H220
Isobutane	CAS-No.: 75-28-5	≥ 1 – ≤ 5	Flam. Gas 1, H220

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : If inhaled and if breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Give oxygen or artificial respiration if necessary. If experiencing respiratory symptoms: Call a poison center or a doctor.

First-aid measures after skin contact : Thaw frosted parts with lukewarm water. Do not rub affected area. Get medical advice/attention.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention if you feel unwell.

First-aid measures after ingestion : Ingestion is not considered a potential route of exposure. Get medical advice/attention if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation : In high concentrations : Anesthetic effects. Shortness of breath. Inhalation of vapors may cause respiratory irritation. Headache. Dizziness. Nausea.

Symptoms/effects after skin contact : May cause moderate irritation. Rapid evaporation of the liquid may cause frostbite.

Symptoms/effects after eye contact : This gas is non-irritating; but direct contact with liquefied/pressurized gas or frost particles may produce severe and possibly permanent eye damage from freeze burns.

Symptoms/effects after ingestion : Ingestion is not considered a potential route of exposure.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

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SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Carbon dioxide. Dry chemical. Foam. Water spray.
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard : Extremely flammable aerosol. In case of fire and/or explosion do not breathe fumes.
Explosion hazard : Contains gas under pressure; may explode if heated. Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.
Hazardous decomposition products in case of fire : Toxic fumes may be released. Carbon dioxide. Carbon monoxide. Nitrogen oxides. Sulphur oxides.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Evacuate the danger area. Eliminate all ignition sources if safe to do so. Move containers from fire area if it can be done without personal risk. Use water spray or fog for cooling exposed containers. Fight fire from safe distance and protected location. Use extinguishing media appropriate for surrounding fire. Prevent fire-fighting water from entering environment.
Protection during firefighting : Wear a self contained breathing apparatus. Wear fire/flame resistant/retardant clothing. Do not attempt to take action without suitable protective equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : No open flames. No smoking. Isolate from fire, if possible, without unnecessary risk. Remove ignition sources. Use special care to avoid static electric charges.

6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment. Refer to section 8.2.
Emergency procedures : Evacuate unnecessary personnel. Ventilate spillage area. Avoid breathing spray. Avoid contact with skin and eyes. No action shall be taken without appropriate training or involving any personal risk. No flames, no sparks. Eliminate all sources of ignition.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. Refer to section 8.2.
Emergency procedures : Evacuate unnecessary personnel. Use non-sparking tools. Ventilate area. No naked flames, sparks, and do not smoke.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Stop leak, if possible without risk. Remove ignition sources.
Methods for cleaning up : Move containers from spill area. Leave the product to evaporate. Use non-sparking tools. Place in a suitable container for disposal in accordance with the waste regulations (see Section 13).
Other information : Dispose of or recycle in line with local regulations for aerosol products.

6.4. Reference to other sections

For further information refer to section 13. For further information refer to section 8: "Exposure controls/personal protection".

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Ensure good ventilation of the work station. Avoid breathing spray. Wear recommended personal protective equipment. Do not get in eyes, on skin, or on clothing. Eliminate all ignition sources if safe to do so. Take precautionary measures against static discharge. Use explosion-proof equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use.
- Hygiene measures : Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Direct sunlight, Heat sources, Take precautionary measures against static discharges. Store in a dry place. Keep in fireproof place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Store in accordance with local, regional, national or international regulation. Do not store in unlabelled containers. Do not expose to temperatures exceeding 50 °C/ 122 °F.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Butane (106-97-8)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Butane
ACGIH OEL STEL	1000 ppm (EX - Explosion hazard)
Remark (ACGIH)	TLV® Basis: CNS impair
Regulatory reference	ACGIH 2024
Propane (74-98-6)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Propane
Remark (ACGIH)	TLV® Basis: Simple Asphyxiant
Regulatory reference	ACGIH 2024
USA - OSHA - Occupational Exposure Limits	
Local name	Propane
OSHA PEL TWA	1800 mg/m ³ 1000 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
Isobutane (75-28-5)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Isobutane

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Isobutane (75-28-5)	
ACGIH OEL STEL	1000 ppm (EX - Explosion hazard)
Remark (ACGIH)	TLV® Basis: CNS impair
Regulatory reference	ACGIH 2024
Monitoring methods	
Monitoring methods	Refer to all applicable national, international and local regulations or provisions.

8.2. Appropriate engineering controls

Appropriate engineering controls : Provide local exhaust or general room ventilation. Avoid all unnecessary exposure.
Environmental exposure controls : Avoid release to the environment. Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Wear recommended personal protective equipment. Personal protective equipment should be chosen according to the NIOSH standards and in discussion with the supplier of the protective equipment.

Hand protection:

None under normal use. It is a good industrial hygiene practice to minimize skin contact. In case of repeated or prolonged contact wear gloves.
Insulated gloves

Eye protection:

None under normal use. In case of mist, spray or aerosol exposure. Protective goggles

Skin and body protection:

No special clothing/skin protection equipment is recommended under normal conditions of use

Respiratory protection:

No special respiratory protection equipment is recommended under normal conditions of use with adequate ventilation. In case of inadequate ventilation wear respiratory protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Gas
Appearance	: Aerosol.
Color	: Colorless
Odor	: Sweet petroleum
Odor threshold	: No data available
pH	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: -42.2 – -0.5 °C (-44.0 - -31.1 °F)
Flash point	: -104.4 °C (-155.9 °F, estimated)
Relative evaporation rate (butyl acetate=1)	: No data available
Relative evaporation rate (ether=1)	: > 1
Flammability (solid, gas)	: Extremely flammable aerosol.
Vapor pressure	: 2.7579 bar (40 PSIG) @ 21.1°C (69.98 °F)
Relative vapor density at 20°C	: 1.886
Relative density	: 0.567

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Solubility	: Water: 0.008 %
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: Lower explosion limit: 1.9 vol % Gas in air Upper explosion limit: 9.5 vol % Gas in air
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other information

VOC content : 100 %

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known.

10.2. Chemical stability

Extremely flammable aerosol. Contains gas under pressure; may explode if heated.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use. Hazardous polymerization: Will not occur.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7). Protect from sunlight. Overheating. Extremely high or low temperatures. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

Strong oxidizing agents. Alkali. Strong mineral acids.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not applicable
Viscosity, kinematic	: No data available

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Symptoms/effects after inhalation	: In high concentrations : Anesthetic effects. Shortness of breath. Inhalation of vapors may cause respiratory irritation. Headache. Dizziness. Nausea.
Symptoms/effects after skin contact	: May cause moderate irritation. Rapid evaporation of the liquid may cause frostbite.
Symptoms/effects after eye contact	: This gas is non-irritating; but direct contact with liquefied/pressurized gas or frost particles may produce severe and possibly permanent eye damage from freeze burns.
Symptoms/effects after ingestion	: Ingestion is not considered a potential route of exposure.
Other information	: No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Do not allow product to spread into the environment.

12.2. Persistence and degradability

EcoBurner Fuel	
Persistence and degradability	Biodegradability in water: no data available.

12.3. Bioaccumulative potential

EcoBurner Fuel	
Bioaccumulative potential	No data available concerning bioaccumulation.

12.4. Mobility in soil

EcoBurner Fuel	
Ecology - soil	No additional information available.

12.5. Other adverse effects

Other adverse effects : No other effects known.
Effect on global warming : No known effects from this product.

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations : Do not dispose of waste into sewer.
Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Container under pressure. Do not drill or burn even after use.
Ecological information : Avoid release to the environment.

SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

14.1. UN number

DOT NA No : UN1950
UN-No. (TDG) : UN1950
UN-No. (IMDG) : 1950
UN-No. (IATA) : 1950

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14.2. UN proper shipping name

Proper Shipping Name (DOT) : Aerosols
Proper Shipping Name (TDG) : AEROSOLS
Proper Shipping Name (IMDG) : AEROSOLS
Proper Shipping Name (IATA) : Aerosols, flammable

14.3. Transport hazard class(es)

DOT

Transport hazard class(es) (DOT) : 2.1
Hazard labels (DOT) : 2.1



TDG

Transport hazard class(es) (TDG) : 2.1
Hazard labels (TDG) : 2.1



IMDG

Transport hazard class(es) (IMDG) : 2.1
Hazard labels (IMDG) : 2.1



IATA

Transport hazard class(es) (IATA) : 2.1
Hazard labels (IATA) : 2.1



14.4. Packing group

Packing group (DOT) : Not applicable
Packing group (TDG) : Not applicable
Packing group (IMDG) : Not applicable
Packing group (IATA) : Not applicable

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

DOT
UN-No.(DOT) : UN1950
DOT Special Provisions (49 CFR 172.102) : N82 - See 173.306 of this subchapter for classification criteria for flammable aerosols.
DOT Packaging Exceptions (49 CFR 173.xxx) : 306

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DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: 75 kg
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 150 kg
DOT Vessel Stowage Location	: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.
DOT Vessel Stowage Other	: 25 - Protected from sources of heat, 87 - Stow "separated from" Class 1 (explosives) except Division 14, 126 - Segregation same as for Class 9, miscellaneous hazardous materials

TDG

UN-No. (TDG)	: UN1950
TDG Special Provisions	: 80 - Despite section 1.17 of Part 1 (Coming into Force, Repeal, Interpretation, General Provisions and Special Cases), a person must not offer for transport or transport these dangerous goods unless they are in a means of containment that is in compliance with the requirements for transporting gases in Part 5 (Means of Containment), 107 - (1) These Regulations, except for Parts 1 and 2, do not apply to the offering for transport, handling or transport of UN1950, AEROSOLS, and UN2037, GAS CARTRIDGES, that contain dangerous goods included in Class 2.1 or Class 2.2 and that are transported on a road vehicle, a railway vehicle or a vessel on a domestic voyage, if the aerosols or gas cartridges have a capacity less than or equal to 50 mL. (2) Subsection (1) does not apply to self-defence spray.
Explosive Limit and Limited Quantity Index	: 1 L
Excepted quantities (TDG)	: E0
Passenger Carrying Road Vehicle or Passenger Carrying Railway Vehicle Index	: 75 L
Emergency Response Guide (ERG) Number	: 126

IMDG

Special provision (IMDG)	: 63, 190, 277, 327, 344, 381, 959
Limited quantities (IMDG)	: SP277
Excepted quantities (IMDG)	: E0
Packing instructions (IMDG)	: P207, LP200
Packing provisions (IMDG)	: PP87, L2
EmS-No. (Fire)	: F-D - FIRE SCHEDULE Delta - FLAMMABLE GASES
EmS-No. (Spillage)	: S-U - SPILLAGE SCHEDULE Uniform - GASES (FLAMMABLE, TOXIC OR CORROSIVE)
Stowage category (IMDG)	: None
Stowage and handling (IMDG)	: SW1, SW22
Segregation (IMDG)	: SG69

IATA

PCA Excepted quantities (IATA)	: E0
PCA Limited quantities (IATA)	: Y203
PCA limited quantity max net quantity (IATA)	: 30kgG
PCA packing instructions (IATA)	: 203
PCA max net quantity (IATA)	: 75kg
CAO packing instructions (IATA)	: 203
CAO max net quantity (IATA)	: 150kg
Special provision (IATA)	: A145, A167, A802
ERG code (IATA)	: 10L

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

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SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

15.2. International regulations

CANADA

Butane (106-97-8)

Listed on the Canadian DSL (Domestic Substances List)

Propane (74-98-6)

Listed on the Canadian DSL (Domestic Substances List)

Isobutane (75-28-5)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

Butane (106-97-8)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Propane (74-98-6)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Isobutane (75-28-5)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

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Revision date : 5/20/2024
Data sources : Supplier's safety documents.
Training advice : Training staff on good practice.

Full text of H-phrases

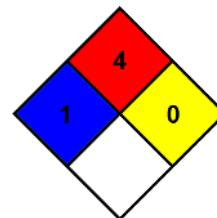
H220	Extremely flammable gas
H222	Extremely flammable aerosol
H280	Contains gas under pressure; may explode if heated

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NFPA health hazard	: 1 - Materials that, under emergency conditions, can cause significant irritation.
NFPA fire hazard	: 4 - Materials that rapidly or completely vaporize at atmospheric pressure and normal ambient temperature or that are readily dispersed in air and burn readily.
NFPA reactivity	: 0 - Material that in themselves are normally stable, even under fire conditions.



Indication of changes:

Sections 1-16.

Safety Data Sheet (SDS), USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.