



SAFETY DATA SHEET

Gas Fuel Cell

Based on Regulation (EC) No. 1907/2006 (Reach) Article 31 Annex II

Section 1: Identification of the substance /preparation and the company / undertaking

1.1 Product identifier

Product name Fuel Cell
Part number IMGAS250, IMGAS350

1.2 Use of the substance/preparation

Propellant for gas nailing tools

1.3 Details of the supplier of the safety data sheet

JCP Construction Products
 Unit 14, Teddington Industrial Estate
 Teddington, Middlesex. TW11 9BQ
 Tel +44 208 943 1800
 Fax +44 208 943 1140

email jcpenquiries@owlett-jaton.com

1.4 Emergency telephone number

+44 208 943 1800 8.30 a.m. to 5.00 p.m. Monday to Friday

Section 2: Hazards identification

2.1 Classification of the substance or mixture

The mixture is classified according to Regulation (EC) No 1272/2008

Hazard classes/Hazard cat.	Hazard statement codes
Pressurized gas	H280
Flammable Gas 1	H220

2.2 Label elements



Signal word (S): Danger

Hazard Statement

H220: Extremely flammable gas

H280: Contains gas under pressure; may explode if heated

Precautionary statement

P210: Keep away from heat/sparks/open flames/hot surfaces. No smoking

P377: Leaking gas fire: Do not extinguish unless leak can be safely stopped

P410 + P403: Protect from sunlight. Store in a well ventilated place

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Section 3: Composition / information on ingredients

Substance/Mixture: Mixture

Ingredients:

Chemical name	CAS No.	EC No.	Conc. in %
Butane	106-97-8	203-448-7	60-80
Propane	74-98-6	200-827-9	20-40

Section 4: First aid measures

4.1 Description of First Aid measures

In all cases of doubt, or where symptoms persist, seek medical attention

4.1.1 In case of Inhalation

If respiratory symptoms develop, move victim away from source of exposure and into fresh air. If symptoms persist seek medical attention.

If victim is not breathing, clear airway immediately and begin artificial respiration. If breathing difficulties develop, oxygen should be administered by qualified personnel.

Seek medical attention

4.1.2 In case of skin contact

Treat burned or frostbitten skin by flushing or immersing the area(s) in lukewarm water. Keep skin warm, dry and clean. If blistering occurs, apply a sterile dressing.

Seek medical attention

4.1.3 In case of eye contact

For contact with the liquified gas, hold eyelids apart and gently flush the affected area(s) in lukewarm water.

Seek immediate medical attention

4.1.4 In case of ingestion

This material is a gas under normal atmospheric conditions and ingestion is unlikely

4.2 Most important symptoms and effects, both acute and delayed

The product is not classified as harmful health effect

4.3 Indication of any immediate medical attention and special treatment needed

If skin irritation or rash occurs, medical advice/attention

Section 5: Fire-fighting measures

5.1 Extinguisher media

Dry chemical or carbon dioxide is recommended. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces.

5.2 Unsuitable extinguishing media

None

5.3 Special dangers hazards arising from the substance or mixture

The material is flammable and can be ignited by heat, sparks, flames, or other sources of ignition (e.g. static electricity, pilot lights, or mechanical/electrical equipment and electronic devices such as mobile telephones, computers, calculators and pagers which have not been certified as intrinsically safe).

Vapours may travel considerable distance to a source of ignition where they can ignite, flash back or explode.

May create vapor / air explosion hazard indoors, in confined spaces, outdoors or in sewers. If container is not properly cooled, it can rupture due to pressure build up.

5.4 Special fire fighting methods and protective clothing for fire-fighters

If necessary, equipped with isolated style protective mask and full protective clothing

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Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures.

6.1.1 For non-emergency personnel

Use personal protective equipment. Ensure adequate ventilation. If insufficient ventilation, wear suitable respiratory equipment. Avoid inhalation of vapour.

6.1.2 For emergency responders

Wear an appropriate NIOSH/MSHA approved respirator if vapour is generated

6.2 Environmental precautions

Do not discharge into sewage / drainage systems

6.3 Methods for containing and cleaning up

Stay upwind and away from spill / release, isolate danger area and keep unauthorised personnel out. Stop spill / release if it can be done with minimal risk. Wear appropriate protective equipment. Water spray may be useful in minimising or dispersing vapours.

6.4 Reference to other sections

See section 7 for information on safe handling

See section 8 for information on personal protective equipment

See section 13 for information on disposal

6.5 Additional information

No other additional information is applicable

Section 7: Handling and storage

7.1 Precautions for safe handling

7.1.1 Protective measures

Practice good housekeeping. Put on appropriate personal protective equipment (Ref Section 8). Do not get in eyes or on skin or clothing. Do not ingest. Use with adequate ventilation. Wash thoroughly after handling.

7.1.2 Advice on general occupational hygiene

Do not eat, smoke, drink in the work area. Wash hands after use. Remove contaminated clothing and protective equipment before entering eating areas

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool well ventilated area, away from heavily trafficked areas and avoiding emergency exits. Do not allow the temperature in the storage area to exceed 30°C. Cylinders should be stored upright and in original packaging. Keep full and empty cylinders separate.

7.3 Specific end use(s)

Not applicable.

Section 8: Exposure controls /personal protection

8.1 Control parameters

8.1.1 Occupational exposure limits

Not available

8.1.2 Additional exposure limits under conditions of use.

Not available

8.1.3 DNEL / DMEL and PNEC-Values

not available

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8.2 Exposure controls

8.2.1 Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands during breaks and at the end of work. Avoid contact with eyes and skin. Provide safety showers and eye cleaning equipment.

8.2.2 Individual protection measures, such as personal protective equipment

Eye / Face protection	Wear safety goggles
Hand protection	Wear safety gloves
Body protection	Suitable protective clothing to prevent liquid or vapor contact
Respiratory protection	In case of brief exposure use respiratory filter device. In case of prolonged exposure use self contained respiratory protective
Thermal hazards	Wear suitable protective clothing to protect against heat.

8.2.3 Environmental exposure controls

Avoid discharge into the environment

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	Gaseous
Colour	Colourless
Odour	Propane
Odour threshold	Not available
pH	Not available
Melting Point / Range (°C)	Not available
Boiling Point / Range (°C)	Not available
Flash Point / Range (°C)	Not available
Evaporation rate	Not available
Flammability limit-lower (%)	Not available
Flammability (solid, gas)	Not available
Ignition temperature (°C)	Not available
Vapour pressure (25°C)	50°C
Vapour density	Not available
Relative density	Not available
Bulk density	Not applicable
Water solubility	Slightly soluble
Explosive properties	Not available
Oxidising properties	Does not meet the criteria for classification as oxidising

9.2 Other information

Fat solubility	Slightly soluble in alcohol, ether
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Section 10: Stability and reactivity

10.1 Reactivity

The substance is stable under normal storage and handling conditions

10.2 Chemical stability

Stable at room temperature in closed container under normal storage and handling conditions

10.3 Possibility of hazardous reactions

No dangerous reactions known

10.4 Conditions to avoid

Incompatible materials. Avoid high temperatures. Avoid all possible sources of ignition.

10.5 Incompatible materials

Avoid contact with strong oxidising agents

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10.6 Hazardous decomposition products

Carbon oxides, water

Section 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

LD50 (Oral, Rat)	Not available
LD50 (Dermal, Rabbit)	Not available
LC50 (Inhalation, Rat)	Not available
Skin corrosion/irritation	Not classified
Serious eye damage/irritation	Not classified
Respiratory or skin sensitisation	Not classified
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproduction toxicity	Not classified
STOT single exposure	Not classified
STOT repeated exposure	Not classified
Aspiration hazard	Not classified

Section 12: Ecological information

Toxicity

Acute toxicity		Time	Species	Method	Eval.	Remarks
LC50	N/A	96 hrs	Fish	OECD203	N/A	None
EC50	N/A	48 hrs	Daphnia	OECD202	N/A	None
EC50	N/A	72 hrs	Algae	OECD201	N/A	None

Persistence and degradability	N/A
Bio accumulative potential	N/A
Results of PBT & PvB assessment	N/A

Section 13: Disposal considerations

13.1 Waste treatment methods

The material should be disposed of by incineration in a chemical incinerator in compliance with national and regional regulations

13.2 Product/Packaging disposal

If empty container retains product residues, all label precautions must be observed. Return for re-use or disposal, according to national and regional regulations

Section 14: Transport information

	Land Transport ADR/RID	Sea Transport IMDG	Air Transport ICAO/IATA
UN Number	UN1950	UN1950	UN1950
UN Proper Shipping Name	Aerosols, flammable	Aerosols, flammable	Aerosols, flammable
Transport hazard class	2.1	2.1	2.1
Environmental hazards	None	None	None
Special precautions for user	See section 2.2	See section 2.2	See section 2.2

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Section 15: Regulatory information

15.1 Safety, health and environmental regulations / legislation specific to the substance/mixture

Employment restrictions concerning young persons must be observed. For use only by suitably qualified persons

Chemical Assessment carried out No

Section 16: Other information

16.1 Indication of changes

Revision notes next to change

16.2 Hazard statements in full

H220 Extremely flammable gas

H280 Contains gas under pressure; may explode if heated

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