

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

1.1. Product identifier: FUEL CELL P-700 (802070) , FUEL CELL P-1000 802100)

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

Gas charging for use with nailing tools. It should not be used for purposes other than those described above.

1.3. Details of the supplier of the safety data sheet.

GRUPODESA FASTENERS, S.A.U.
Carrer Basters, 29 Pol.Ind Palau del Reig | 43800 Valls
Tarragona | Spain
Tlf: +34 977 60 84 06
www.grupodesa.es

1.4. Emergency telephone number.

+34 977 60 84 06 (8:00 to 17:00 h.)

SECTION 2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture according to regulation (CE) n.º 1272/2008 (CLP)

Extremely flammable aerosol H222 Pressurised container: May burst if heated H229

2.2. Label elements

Labelling according to Regulation (EU) n.º 1272/2008 (CLP). Hazard statements:

H222: Extremely flammable aerosol

H229: Pressurised container: May burst if heated

Signal words: Danger

Hazard pictograms:



HS02: Flammable

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. P211: Do not spray on an open flame or other ignition source.

P251: Do not pierce or burn, even after use.

P410+P412: Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 ° F.

2.3. Other Hazards

Other hazards: Not applicable.

PBT: This product is not identified as a PBT/vPvB substance.

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SECTION 3. **COMPOSITION/INFORMATION OF INGREDIENTS:**

1.1. Substance: Not applicable

1.2. Mixtures Hazardous ingredients:

EINECS	CAS	CLP Classification	Percent
PROPANE			
200-827-9	74-98-6	Flam. Gas 1: H220; Liq. Gas: H280	75
BUTANE			
203-448-7	106-97-8	Flam. Gas 1: H220; Liq. Gas: H280	25

SECTION 4. **FIRST AID MEASURES**

4.1. Description of first aid measures

Skin contact: In case of frostbite, do not remove clothes. Get immediate medical attention..

Eye contact: Immediately flush eyes with plenty of water. Get immediate medical attention.

Ingestion: Get immediate medical attention.

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention.

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

No data available.

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

Show this safety data sheet to the doctor in attendance.

SECTION 5. **FIGHTING MEASURES**

5.1. Extinguishing media

Dry chemical; carbon dioxide; foam; water

5.2. Special hazards arising from the substance or mixture

Flash point: approximately -108 °C
Flammability limits (% in air by volume): approximately 2 to 10.

5.3. Advice for fire-fighters

Fuel cells may release contents if not sufficiently cooled with water spray. Isolate hazard area and evacuate unprotected personnel. Full emergency equipment with self contained breathing apparatus and full protective clothing should be worn by firefighters.

SECTION 6. **ACCIDENTAL RELEASE MEASURES**

6.1. Personal precautions, protective equipment and emergency procedures

Remove possible causes of ignition-do not smoke. Ensure sufficient supply of air. Avoid inhaling.

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6.2. Environmental precautions

If leakage occurs, dam up.

6.3. Methods and material for containment and cleaning up

If spray or gas escapes, ensure ample fresh air is available.

6.4. Reference to other sections

Refer to section 8 and 13 of SDS.

SECTION 7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Observe directions on label. Keep away from sources of ignition-do not smoke. Ensure good ventilation.

7.2. Conditions for safe storage, including any incompatibilities

Conditions for safe storage: Recommended storagetemperature: Below 49 °C Shelf life: 18 months.

Handling and storage precautions: In addition to limitations on storage temperature, fuel cells should be handled and stored so as to avoid puncture. Even after use, do not puncture fuel cell or expose fuel cell to high temperature. Do not attempt to refill the fuel cell.

7.3. Specific end use(s)

Except for the indications already specified, it is not necessary to make any special recommendations regarding the uses of this product.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters Dangerous ingredients:

Exposure limits:	OSHA PEL (ppm)	ACGIH (ppm)
Propane	1000	Simple asphyxant
Butane	1000	Simple asphyxant
Isobutan	1000	Simple asphyxant

DNEL/PNEC: No data available.

8.2. Exposure controls

Engineering measures: No special requirements.

Personal protection:

Eye protection requirements: eye protection must be worn when handling fuel cells.

Skin protection requirements: Gloves are recommended when handling fuel cells.

Respiratory/ventilationrequirements: Use in a well ventilated environment.

Controles de la exposición medioambiental:

No hay requisitos especiales.

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SECTION 9. SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical form:	Liquified gas
Colour:	Colorless
Odour:	Faintly olefinic
Melt point/freezepoint:	Approximately -108°C
Boiling point:	Approximately -45°C
Tasa de evaporación:	No data available
Flammability:	Yes
Lower and upper explosion limit:	No data available / not applicable.
Flash point:	No data available / Not applicable.
Auto-ignition temperature:	No data available / not applicable.
Decomposition temperature:	No data available / not applicable.
pH:	Not applicable.
Kinematic viscosity:	No disponible / No aplicable
Solubility in water:	Slightly
Partition coefficient n-octanol/water (logvalue):	No data available / not applicable.
Vapor pressure:	Approximately 13.2 bar/at 50°C
Vapor density:	Approximately 1.5 (air = 1)Further specification
Specific gravity:	Approximately 0.6 for liquefied gas
Particle characteristics:	Not applicable.
Explosive properties:	No data available / not applicable.
VOC (Volatile by weight):	100%

9.2. Other information

No data available

SECTION 10. STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

Stability: product is stable.

Hazardous polymerization: will not occur.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

No data available.

10.5. Incompatible materials

Incompatibilities: oxidizing agents, halogens and acids.

10.6. Hazardous decomposition products

Decomposition products: thermal decomposition or burning may produce carbon monoxide or carbon dioxide from fuel gas combustion.

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SECTION 11. TOXICOLOGICAL INFORMATION

11.1. Acute toxicity

Acute oral toxicity : No adverse effect observed
Acute dermal toxicity : No adverse effect observed
Acute inhalation toxicity : No adverse effect observed

SECTION 12. SECTION 12. ECOLOGICAL INFORMATION

12.1. Toxicity

Anesthetic to animals & insets at high concentration. Not expected to pose hazards to aquatic life.

12.2. Persistence and degradability

Will vaporize rapidly when released in atmosphere.

12.3. Bioaccumulative potential

Not inhibitory to plant growth at normal concentration. Bioaccumulation is not expected.

12.4. Mobility in soil

Not data available

12.5. Results of PBT and vPvB assessment

Not data available.

12.6. Endocrine disrupting properties

Not data available.

12.7. Other adverse effects

Not data available.

SECTION 13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste disposal should be done according to 2008/98/EC, covering waste and dangerous waste.

Product/packaging disposal:Waste must be disposed of in accordance with local regulations. Waste codes should be assigned by the user in discussion with the local waste disposal authorities.

Waste treatment:Not allowed

Sewage disposal:Prohibited

Other disposal: Recommendation: Handle contaminated packages in the same way as the product itself.

SECTION 14. TRANSPORT INFORMATION

Transport : May be by road/by rail as per national regulations (ADR/RID)

14.1. UN-Number: 2037

14.2. UN Proper shipping name: Receptacles, small, containing gas

14.3. Transport hazard class : 2.1

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14.4. Packing group : II

14.5. Environmental hazards : Not applicable

14.6. Special precautions for user :

- Transport in closed containers that are upright and secure.
- Ensure that persons transporting the product are well trained and should know, what to do in case of an accident or spillage.
- They must observe safety regulations & take precautions to prevent damage.

14.7. Transport in bulk according to annexure II 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

In general for classification and labeling see section 2.
Ensure restrictions are observed

Compliance is in according with following in EU:

- Commission Regulations (EU) No 474/2014 of 8 May 2014
- Commission Regulations (EU) no 944/2013 of 2 Oct 2013 on classification, labeling and packaging of substances and mixtures.
- Waste Framework directive 2008/98/EC

Compliance is in accordance with following in UK:

- Management of Health and safety at work Regulations (1999)
- Control of substances Hazardous to Health Regulations(COSHH 2002)
- Personal protective Equipment Regulations(2002)

SECTION 16.

This product should be stored, handled and used in accordance with good industrial hygiene practices and in conformity with local legal regulations.

This SDS has been prepared from the supplier's original.

Modifications with respect to the previous SDS: It is the first edition prepared in accordance with Regulation (EU) No 2015/830.

Methods used for the purpose of classifying the mixture according to Regulation 1272/2008 (CLP): Calculation made from the classification of the components.

Recommendations regarding appropriate training for workers: Workers handling the product have received information and training on safety instructions.

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SAFETY DATA SHEET (REACH)

According to Regulation (UE) N° 2020/878 amendment of Annex II of
Regulation (CE) N° 1907/2006 (REACH)



FUEL CELL P-700 - FUEL CELL P-1000

Revision 1 (eng.21/09/2021)

Prov: (eng 01/03/2021)

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Legal Disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product. Data are based on the current state of our knowledge, but do not constitute any guarantee of qualities of the product and do not generate any contractual legal relationship.

The information on this Product Safety Data Sheet is based on current knowledge and current EC and national laws, in that the working conditions of the users are beyond our knowledge and control.

The product must not be used for purposes other than those specified, without first having a written instruction for its handling. It is always the responsibility of the user to take the appropriate measures in order to comply with the requirements established in the legislation

(End of Safety Data Sheet)