



# SAFETY DATA SHEET

## FIRMAHOLD 50ml FUEL CELL FOR FINISHING NAILERS

SDS Ref:  
02  
Revision 3  
Revision Date:  
25.04.2018

### SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### 1.1. Product identifier

Product name: FIRMAHOLD FINISHING NAILER FUEL CELL 50ml (High pressure)  
 Additional identification: BFC  
 Identification of the product: see section 3  
 Index Number: Not available  
 REACH pre-registration No.: see section 3

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

1.2.1 Identified uses: Combustion.  
 1.2.2 Uses advised against: Not available.

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

Supplier: T.I. Midwood & Co. Ltd  
 TIMco House  
 Green Lane  
 Wardle  
 Nantwich  
 CW5 6BJ  
 01829 261111

#### 1.4. Emergency telephone number

01829 261 111 (Office hours only)  
 Mon - Fri: 08:30 - 17:00

### SECTION 2: HAZARDS IDENTIFICATION

#### 2.1. Classification of the substance or mixture

##### 2.1.1 Classification

The substance is classified as following according to REGULATION (EC) No 1272/2008:

Hazard classes/Hazard categories	Hazard statement codes
Press. Gas	H280
Flam. Gas 1	H220

For full text of H- phrases: see section 2.2.

#### 2.2. Label elements

Hazard Pictograms:



Signal Word

Danger

Hazard Statements

H220: Extremely flammable gas.  
 H280: Contains gas under pressure; may explode if heated.

Precautionary Statements

P101: If medical advice is needed, have product container or label at hand  
 P102: Keep out of reach of children  
 P103: Read label before use  
 P210: Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
 P377: Leaking gas fire: Do not extinguish, unless leak can be stopped safely.  
 P381: Eliminate all ignition sources if safe to do so.  
 P410 + P403: Protect from sunlight. Store in a well-ventilated place.

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## 2.3. Other hazards

Not available.

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2. Mixtures

PROPENE		CLASSIFICATION	40-60%
CAS-No.: 115-07-1	EC No.: 204-062-1	H220 H280	05-2114131914-52-0000
BUTANE		CLASSIFICATION	15-60%
CAS-No.: 106-97-8	EC No.: 203-448-7	H220 H280	05-2114131909-43-0000
ISOBUTANE		CLASSIFICATION	0-15%
CAS-No.: 75-28-5	EC No.: 200-857-2	H220 H280	05-2118669741-32-0000
PROPANE		CLASSIFICATION	0-15%
CAS-No.: 74-98-6	EC No.: 200-827-9	H220 H280	05-2114131905-51-0000

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of first aid measures

In all cases of doubt, or when 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 and immediately begin artificial respiration. If breathing difficulties develop, oxygen should be administered by qualified personnel. Seek immediate medical attention.

#### 4.1.2 In case of skin contact:

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

#### 4.1.3 In case of eyes contact:

For contact with the liquefied gas, hold eyelids apart and gently flush the affected eye(s) with 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 to human health effect.

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

If skin irritation or rash occurs, get medical advice/attention.

## SECTION 5: FIREFIGHTING MEASURES

### 5.1. Extinguishing media

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

Unsuitable extinguishing media: Not available.

### 5.2. Special hazards arising from the substance or mixture

This 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 cell phones, computers, calculators, and pagers which have not been certified as intrinsically safe). Vapors may travel considerable distances 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 in the heat of a fire. Closed containers exposed to extreme heat can rupture due to pressure buildup.

### 5.3. Advice for firefighters

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

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## SECTION 6: ACCIDENTAL RELEASE MEASURES

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### 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 and material for containment and cleaning up

Stay upwind and away from spill/release. Notify persons down wind of the spill/release, isolate danger area and keep unauthorized personnel out. Stop spill/release if it can be done with minimal risk. Wear appropriate protective equipment. Water spray may be useful in minimizing ordispersing vapors.

### 6.4. Reference to other sections

See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for information on disposal.

## SECTION 7: HANDLING AND STORAGE

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### 7.1. Precautions for safe handling

- 7.1.1 Protective measures: Practice good housekeeping. Put on appropriate personal protective equipment (see 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, drink and smoke in work areas. 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 cool, dry, well-ventilated area away from heavily trafficked areas and emergency exits. Do not allow the temperature where cylinders are stored to exceed 30 °C. Cylinders should be stored upright and firmly secured to prevent falling or being knocked over. Full and empty cylinders should be segregated.

### 7.3. Specific end use(s)

Not applicable.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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### 8.1. Control parameters

- 8.1.1 Occupational exposure limits: Not available.
- 8.1.2 Additional exposure limits under the conditions of use: Not available.
- 8.1.3 DNEL/DMEL and PNEC-Values: Not available.

### 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 the work. Avoid contact with the eyes and skin.  
Provide safety shower and cleaning eyes equipments.
- 8.2.2 Individual protection measures, such as personal protective equipment:
- |                         |   |
|-------------------------|---|
| Eye/face protection:    | Wear safety goggles.  |
| Hand protection:        | Wear safety gloves to prevent any possibility of liquid contact and repeated or prolonged vapor contact.  |
| Body protection:        | Protective clothing to prevent any possibility of liquid contact and repeated or prolonged vapor contact.   |
| Respiratory protection: | In case of brief exposure or low pollution, use respiratory filter device. In case of intensive or longer exposure, use self-contained respiratory protective device. |
| Thermal hazards:        | Wear suitable protective clothing to prevent heat.8.2.3   |
- Environmental exposure controls: Avoid discharge into the environment.  
According to local regulations, Federal and official regulations.

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## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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### 9.1. Information on basic physical and chemical properties

Appearance:	Gaseous
Colour:	Colourless
Odour:	Odorless
Odour threshold:	Not available
pH:	Not available
Melting point/range (°C):	Not available
Boiling point/range (°C):	Not available
Flash point (°C):	Not available
Evaporation rate:	Not available
Flammability limit - lower (%):	Not available
Flammability (solid, gas):	Extremely Flammable
Ignition temperature (°C):	Not available
Upper/lower flammability/explosive limits:	Not available
Vapour pressure (25°C):	17.8bar/50°C
Vapour density:	Not available
Relative Density:	Not available
Bulk density (kg/m <sup>3</sup> ):	Not available
Water solubility (g/l):	Slightly soluble
n-Octanol/Water (log Po/w):	Not available
Auto-ignition temperature:	Not available
Decomposition temperature:	Not available
Viscosity, dynamic (mPa.s):	Not available
Explosive properties:	Not available
Oxidising properties:	Not available
Molecular Formula:	Not available
Molecular Weight:	Not available

### 9.2. Other information

Fat solubility(solvent– oil to be specified) etc:	Soluble in alcohol, ether.
Surface tension:	Not available
Dissociation constant in water( pKa):	Not available
Oxidation-reduction Potential:	Not available

## SECTION 10: STABILITY AND REACTIVITY

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### 10.1. Reactivity

The substance is stable under normal storage and handling conditions.

### 10.2. Chemical stability

Stable at room temperature in closed containers 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

Strong oxidizing agents.

### 10.6. Hazardous decomposition products

Carbon oxides. Water.

## SECTION 11: TOXICOLOGICAL INFORMATION

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### 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 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 classified

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## SECTION 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity

Acute toxicity		Time	Species	Method	Evaluation	Remarks
LC50	n/a	96h	Fish	OECD 203	n/a	n/a
EC50	n/a	48h	Daphnia	OECD 202	n/a	n/a
EC50	n/a	72h	Algae	OECD 201	n/a	n/a

### 12.2. Persistence and degradability

Not available

### 12.3. Bioaccumulative potential

Not available

### 12.4. Mobility in soil

Not available

### 12.5. Results of PBT and vPvB assessment

Not available

### 12.6. Other adverse effects

Not available

## 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 requirements.

## SECTION 14: TRANSPORT INFORMATION

	Land transport(ADR/RID)	Sea transport (IMDG)	Air transport (ICAO/IATA)
UN-Number	1950	1950	1950
UN Proper shipping name	Fuel cell cartridges or fuel cell cartridges contained in equipment or fuel cell cartridges packed with equipment	Fuel cell cartridges or fuel cell cartridges contained in equipment or fuel cell cartridges packed with equipment	Fuel cell cartridges or fuel cell cartridges contained in equipment or fuel cell cartridges packed with equipment
Transport hazard Class	2.1	2.1	2.1
Packaging group	-	-	-
Environmental hazards	No	No	No
Special precautions for user	See section 2.2	See section 2.2	See section 2.2
Transport in bulk according to Annex II of MARPOL and the IBC Code	-	-	-

## SECTION 15: REGULATORY INFORMATION

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

Relevant information regarding authorization:

Not applicable.

Relevant information regarding restriction:

Not applicable.

Other EU regulations:

Employment restrictions concerning young person must be observed. For use only by technically qualified individuals.

Other National regulations:

Not applicable

### 15.2. Chemical Safety Assessment

Chemical Safety Assessment has been carried out?

No.

## SECTION 16: OTHER INFORMATION

### 16.1 Indication of changes:

Version 1.0

Amended by EU No 2015/830

### 16.2 Training instructions:

Not applicable.

### 16.3 Further information:

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

## ***SAFETY DATA SHEET - FIRMAHOLD 80ml FUEL CELL FOR FINISHING NAILERS***

### **16.4 Notice to reader:**

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgment of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.