

Tucks Fasteners & Fixings Century Business Park, 10 St Margaret's Rd, Dublin 11, D11 TN80

Safety Data Sheet According to Regulation (EC) No 1907/2006

Fuel Cells For Nailer (High-pressure)

Version 1.0

Issue date: 06/02/2017 Revision date: 06/02/2017

SDS Record Number: CSSS-TCO-010-100005

Section 1 Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier:				
Identification on the label/Trade name:	Fuel Cells For Nailer (High-pressure)			
Additional identification:	Not available			
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 subs	tance 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:	Nailco Limited			
A	Suite C, 74 Oldfield Road			
	Hampton, Middlesex TW12 2HR			
Contact person:	Ruth Keane			
Telephone:	0208 941 1722			
Fax:	0208 941 3029			
1.4 Emergency telephone Number:				
0208 941 1722				
Available outside office hours?	YES NO X			

Section 2 Hazards Identification :

2.1 Classification of the substance/mixture:

2.1.1 Classification:

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

REGULATION (EC) No 1272/2008		
Hazard classes/Hazard categories	Hazard statement codes	
Press.Gas	H280	
Flam. Gas 1	H220	

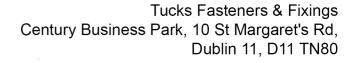
For full text of H- phrases: see section 2.2.

2.2 label elements:

Product name: Fuel Cells For Nailer (High-pressure)

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Hazard Pictograms:

Signal Word(S):

Danger

Hazard Statement:

H220: Extremely flammable gas.

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

Precautionary statement:

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.

2.3 Other hazards:

Not available.

Section 3 Composition/information on ingredients

Substance/Mixture:

Mixture

Ingredient(s):

Chemical Name	Pre-Registration No.	CAS No.	EC No.	Concentration	Classification
Propene	05-2114131914-52-0000	115-07-1	204-062-1	40-60%	H220 H280
Isobutane	05-2118669741-32-0000	75-28-5	200-857-2	15-60%	H220 H280
Butane	05-2114131909-43-0000	106-97-8	203-448-7	0-15%	H220 H280
Propane	05-2114131905-51-0000	74-98-6	200-827-9	0-15%	H220 H280

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:

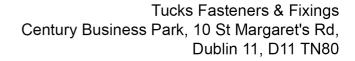
If respiratory symptoms develop, move victim away from source of exposure and into fresh air. If symptoms persist, seek medical attention. If victim is not breathing, clear airway and immediately begin artificial respiration. If breathing difficulties develop, oxygen should be administered by qualified 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 Fire-Fighting 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.

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 the sewage / drainage systems.

6.3 Methods for Containment and Cleaning 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 or dispersing 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

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.



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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

8.1 Control parameters:

8.1.1 Occupational exposure limits:

Not available.

8.1.2 Additional exposure limits under the

Not available.

conditions of use:

8.1.3 DNEL/DMEL and PNEC-Values:

Not available.

8.2 Exposure controls:

8.2.1Appropriate 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.

Section 9 Physical and chemical properties

9.1 Information on basic physical and chemical properties:

Appearance:

Gaseous

Colour:

Colorless

Odour:

pH:

Odorless

Odour threshold:

Not available

Not available

Melting point/range (°C):

Not available

Boiling point/range (°C):

Not available

Flash point (°C): **Evaporation rate:** Not available Not available

Flammability limit - lower (%):

Not available

Flammability (solid, gas):

Extremely Flammable

Ignition temperature (°C):

Not available

Upper/lower flammability/explosive limits:

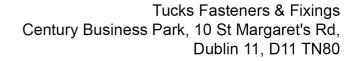
Not available

Vapour pressure (25°C):

17.8bar/50°C

Vapour density:

Not available





Not available **Relative Density:** Not available Bulk density (kg/m³): Slightly soluble Water solubility (g/l): n-Octanol/Water (log Po/w): Not available Not available Auto-ignition temperature: Not available Decomposition temperature: Not available Viscosity, dynamic (mPa.s): Not available **Explosive properties:** Not available **Oxidising properties:**

Molecular Formula:
Molecular Weight:

9.2. Other information:

Fat solubility(solvent- oil to be specified)

Slightly soluble in alcohol, ether.

etc:

Surface tension:Not availableDissociation constant in water(pKa):Not availableOxidation-reduction Potential:Not available

Section 10 Stability and reactivity

10.1 Reactivity:The substance is stable under normal storage and handling conditions.

Not available

Not available

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.

Not classified

Not classified

10.5 Incompatible materials: Avoid contact with strong oxidizing agents.

10.6 Hazardous decomposition products: Carbon oxides, water.

Section 11 Toxicological information

11.1 Information on toxicological effects:

Acute toxicity:

STOT-repeated exposure:

Aspiration hazard:

Not available LD50(Oral, Rat): Not available LD50(Dermal, Rabbit): Not available LC50(Inhalation, Rat): Skin corrosion/Irritation: Not classified Serious eye damage/irritation: Not classified Not classified Respiratory or skin sensitization: Not classified Germ cell mutagenicity: Carcinogenicity: Not classified Reproductive toxicity: Not classified Not classified STOT- single exposure:



Section 12 Ecological information

12.1Toxicity:

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&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	UN3478	UN3478	UN3478	
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 Regulation information

15.1 Safety, health and environmental regulations/le	egislation 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 has been YES carried out?

NO

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Version #: 1.0 Issue date: 06-02-2017. Revision date: 06-02-2017.

SDS EU 6/7



Section 16 Other information

16.1 Indication of changes:

Version 1.0 Amended by (EU) 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.

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.