



an AIR LIQUIDE Group Company

SAFETY DATA SHEET

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Supersedes : 0 / 0 / 0

5% Ethylene in Nitrogen

82281100



F+ : Extremely flammable



2.1 : Flammable gases

SECTION 1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name : 5% Ethylene in Nitrogen
 SDS Nr : 82281100
 Use : Industrial and professional. Perform risk assessment prior to use.
 Company identification : Energas Ltd.
 Westmorland Street, Hull HU2 0HX,
 United Kingdom

E-Mail address (competent person) : mark.nugent@energas.co.uk
 Emergency telephone number : 01482 329333

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

2.2. Label elements

2.3. Other hazards

: None.

SECTION 3. Composition/information on ingredients

Mixture.

Components : This product is hazardous.

Substance name	Contents	CAS No EC No Index No Registration no	Classification(DSD)	Classification(CLP)
Ethylene	: 5 %	74-85-1 200-815-3 601-010-00-3 01-2119462827-27-	F+; R12 R67	Flam. Gas 1 (H220) STOT SE 3 (H336) Press. Gas Liquefied (H280)
Nitrogen	: 95 %	7727-37-9 231-783-9 ----- *1	Not classified (DSD)	Press. Gas Compressed (H280)

Full text of R-phrases see section 16.

Full text of H-statements see section 16.

* 1: Listed in Annex IV / V REACH, exempted from registration.

* 2: Registration deadline not expired.

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SECTION 4. First aid measures

First aid measures

- Inhalation : In high concentrations may cause asphyxiation. Symptoms may include loss of mobility/consciousness. Victim may not be aware of asphyxiation. Remove victim to uncontaminated area wearing self contained breathing apparatus. Keep victim warm and rested. Call a doctor. Apply artificial respiration if breathing stopped.
- Ingestion : Ingestion is not considered a potential route of exposure.

SECTION 5. Firefighting measures

Extinguishing media

- Suitable extinguishing media : All known extinguishants can be used.

Specific hazards

- : Exposure to fire may cause containers to rupture/explode.

Hazardous combustion products

- : None.

Specific methods

- : Do not extinguish a leaking gas flame unless absolutely necessary. Spontaneous/explosive re-ignition may occur. Extinguish any other fire. If possible, stop flow of product. Move away from the container and cool with water from a protected position.

Special protective equipment for fire fighters

- : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6. Accidental release measures

Personal precautions

- : Evacuate area. Ensure adequate air ventilation. Eliminate ignition sources.

Clean up methods

- : Try to stop release. Ventilate area.

SECTION 7. Handling and storage

Handling

- : Open valve slowly to avoid pressure shock. Keep away from ignition sources (including static discharges). Suck back of water into the container must be prevented. Do not allow backfeed into the container. Use only properly specified equipment which is suitable for this product, its supply pressure and temperature. Contact your gas supplier if in doubt. Refer to supplier's container handling instructions.

Storage

- : Segregate from oxidant gases and other oxidants in store. Keep container below 50°C in a well ventilated place.

SECTION 8. Exposure controls/personal protection

8.2. Exposure controls

Personal protection

- : Do not smoke while handling product. Ensure adequate ventilation.

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SECTION 9. Physical and chemical properties

Physical state at 20°C / 101.3kPa : Compressed gas.
Colour : Colourless.
Odour : Hydrocarbon.
Relative density, gas (air=1) : Lighter or similar to air.
Solubility in water [mg/l] : No data available.

SECTION 10. Stability and reactivity

Stability and reactivity : Can form explosive mixture with air.
May react violently with oxidants.

SECTION 11. Toxicological information

Toxicity information : No known toxicological effects from this product.
Rat inhalation LC50 [ppm/4h] : No data available.

SECTION 12. Ecological information

Ecological effects information : No known ecological damage caused by this product.
Effect on ozone layer : None.

SECTION 13. Disposal considerations

General : Do not discharge into areas where there is a risk of forming an explosive mixture with air.
Waste gas should be flared through a suitable burner with flash back arrestor.
Do not discharge into any place where its accumulation could be dangerous.
Contact supplier if guidance is required.
Disposal method : Consult supplier for specific recommendations.

SECTION 14. Transport information

UN number : 1954
Labelling ADR, IMDG, IATA



: 2.1 : Flammable gases

Land transport (ADR/RID)

H.I. nr : 23
UN proper shipping name : COMPRESSED GAS, FLAMMABLE, N.O.S. (Ethylene, Nitrogen)
Transport hazard class(es) : 2
Classification code : 1 F
Packing group : P200
Packing Instruction(s) : P200
Tunnel Restriction : B/D Tank carriage: Passage forbidden through tunnels of category B, C, D and E; Other carriage: Passage forbidden through tunnels of category D and E

Sea transport (IMDG)

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SECTION 14. Transport information (continued)

Proper shipping name : COMPRESSED GAS, FLAMMABLE, N.O.S. (Ethylene, Nitrogen)
 Class : 2.1
 Emergency Schedule (EmS) - Fire : F-D
 Emergency Schedule (EmS) - Spillage : S-U
 Packing instruction : P200
 IMDG-Marine pollutant : -

Air transport (ICAO-TI / IATA-DGR)

Proper shipping name (IATA) : COMPRESSED GAS, FLAMMABLE, N.O.S. (Ethylene, Nitrogen)
 Class : 2.1
 Passenger and Cargo Aircraft : DO NOT LOAD IN PASSENGER AIRCRAFT.
 Cargo Aircraft only : Allowed.
 Packing instruction - Cargo Aircraft only : 200
 ADR/RID
 - IMO-IMDG code
 - ICAO/IATA

Other transport information : Avoid transport on vehicles where the load space is not separated from the driver's compartment.
 Ensure vehicle driver is aware of the potential hazards of the load and knows what to do in the event of an accident or an emergency.
 Before transporting product containers:
 - Ensure that containers are firmly secured.
 - Ensure cylinder valve is closed and not leaking.
 - Ensure valve outlet cap nut or plug (where provided) is correctly fitted.
 - Ensure valve protection device (where provided) is correctly fitted.
 - Ensure there is adequate ventilation.
 - Compliance with applicable regulations.

SECTION 15. Regulatory information

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

SECTION 16. Other information

Training advice : Ensure operators understand the flammability hazard.
 The hazard of asphyxiation is often overlooked and must be stressed during operator training.
 Receptacle under pressure.
 List of full text of R-phrases in section 3. : R12 : Extremely flammable.
 R67 : Vapours may cause drowsiness and dizziness.
 List of full text of H-statements in section 3. : H220 - Extremely flammable gas.
 H280 - Contains gas under pressure; may explode if heated.
 H336 - May cause drowsiness or dizziness.
 Note : This Safety Data Sheet has been established in accordance with the applicable European Union legislation.
 DISCLAIMER OF LIABILITY : Before using this product in any new process or experiment, a thorough material compatibility and safety study should be carried out.
 Details given in this document are believed to be correct at the time of going to press. Whilst proper care has been taken in the preparation of this document, no liability for injury or damage resulting from its use can be accepted.

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