



Leaktrace Safety Data Sheet



1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier: 5% Hydrogen/95% Nitrogen

Product Use Description: General Industrial

Details of provider: Argoco España SL

Carretera A1204 km 0.5 Salida 68 Autovía A334 04800 Albox Almería

Dirección de correo electrónico: info@argoco.es

Telephone: 950 047 174

Emergency telephone number: 643 198 355

2. HAZARDS IDENTIFICATION

Classification according to Regulation 1272/2008 (CLP)

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

Label Elements according to Regulation 1272/2008 (CLP)

Signal Word: Warning

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

Precautionary Statements: Storage: P403: Store in a well-ventilated place.

Classification (Directive)

Not a hazardous substance or preparation according to EC-directives 67/548/EEC or 1999/45/EC. No EC labelling required.

Other hazards

High pressure gas. Can cause rapid suffocation.

Self-contained breathing apparatus (SCBA) may be required

Environmental Effects: Not harmful.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	EINECS / ELINCS Number	CAS Number	Concentration (Volume)
Hydrogen	215-605-7	1333-74-0	5%
Nitrogen	231-783-9	7727-37-9	95%

Componentes	Clasificación (CLP)	REACH Reg. #
Hydrogen	Gas	
Nitrogen	Gas	

If REACH registration numbers do not appear the substance is either exempt from registration, does not meet the minimum volume threshold for registration, or the registration date has not yet come due. Refer to section 16 for full text of each relevant R-phrase and H-phrases.

4. FIRST AID MEASURES

Description of first aid measures

General advice: Remove victim to uncontaminated area wearing self-contained breathing apparatus. Keep victim warm and rested. Call a doctor. Apply artificial respiration if breathing stopped.

Eye contact: Not applicable.

Skin contact: Not applicable.

Ingestion: Ingestion is not considered a potential route of exposure.

Inhalation: Remove to fresh air. If breathing has stopped or is laboured, give assisted respirations. Supplemental oxygen may be indicated. If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation immediately. In case of shortness of breath, give oxygen.

Most important symptoms and effects, both acute and delayed Symptoms: Shivering fit. Sweating. Blurred vision. Headache. Increased pulse rate. Shortness of breath. Rapid respiration. Exposure to oxygen deficient atmosphere may cause the following symptoms: Dizziness. Salivation. Nausea. Vomiting. Loss of mobility/consciousness. Indication of any immediate medical attention and special treatment needed No data available.

5. FIRE-FIGHTING MEASURES

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

Extinguishing media which must not be used for safety reasons: No data available.

Special hazards arising: Upon exposure to intense heat or flame, cylinder will vent rapidly and or rupture violently. Product is non-flammable and does not support combustion. Move away from container and cool with water from a protected position. Keep containers and surroundings cool with water spray.

Special protective equipment for fire-fighters: Wear self-contained breathing apparatus for fire-fighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Evacuate personnel to safe areas. Wear self-contained breathing apparatus when entering area unless atmosphere is proved to be safe. Monitor oxygen level. Ventilate the area.

Environmental precautions: Do not discharge into any place where its accumulation could be dangerous. Prevent further leakage or spillage if safe to do so.

Methods for cleaning up: Ventilate the area.

Additional advice: If possible, stop flow of product. Increase ventilation to the release area and monitor oxygen level. If leak is from cylinder or cylinder valve, call the Argoco España emergency telephone number. If the leak is in the user's system, close the cylinder valve, safely vent the pressure, and purge with an inert gas before attempting repairs.

7. HANDLING AND STORAGE

Handling

Protect cylinders from physical damage; do not drag, roll, slide or drop. Do not allow storage area temperature to exceed 50°C (122°F). Only experienced and properly instructed persons should handle compressed gases. Before using the product, determine its identity by reading the label.

Know and understand the properties and hazards of the product before use. When doubt exists as to the correct handling procedure for a particular gas, contact the supplier. Do not remove or deface labels provided by the supplier for the identification of the cylinder contents. When moving cylinders, even for short distances, use a cart (trolley, hand truck, etc.) designed to transport cylinders. Leave valve protection caps in place until the container has been secured against either a wall or bench or placed in a container stand and is ready for use. Use an adjustable strap wrench to remove over-tight or rusted caps. Before connecting the container, check the complete gas system for suitability, particularly for pressure rating and materials. Before connecting the container for use, ensure that back feed from the system into the container is prevented.

Ensure the complete gas system is compatible for pressure rating and materials of construction. Ensure the complete gas system has been checked for leaks before use. Employ suitable pressure regulating devices on all containers when the gas is being emitted to systems with lower pressure rating than that of the container. Never insert an object (e.g. wrench, screwdriver, pry bar, etc.) into valve cap openings. Doing so may damage valve, causing a leak to occur. Open valve slowly. If user experiences any difficulty operating cylinder valve discontinue use and contact supplier. Close container valve after each use and when empty, even if still connected to equipment. Never attempt to repair or modify container valves or safety relief devices. Damaged valves should be reported immediately to the supplier. Close valve after each use and when empty. Replace outlet caps or plugs and container caps as soon as container is disconnected from equipment. Do not subject containers to abnormal mechanical shocks which may cause damage to their valve or safety devices. Never attempt to lift a cylinder by its valve protection cap or guard. Do not use containers as rollers or supports or for any other purpose than to contain the gas as

supplied. Never strike an arc on a compressed gas cylinder or make a cylinder a part of an electrical circuit. Do not smoke while handling product or cylinders. Never re-compress a gas or a gas mixture without first consulting the supplier.

Never attempt to transfer gases from one cylinder/container to another. Always use backflow protective device in piping. When returning cylinder install valve outlet cap or plug leak tight.

Never use direct flame or electrical heating devices to raise the pressure of a container.

Containers should not be subjected to temperatures above 50°C (122°F).

Prolonged periods of cold temperature below -30°C (-20°F) should be avoided.

Storage

Full containers should be stored so that oldest stock is used first. Stored containers should be periodically checked for general condition and leakage. Observe all regulations and local requirements regarding storage of containers.

Protect containers stored in the open against rusting and extremes of weather. Containers should not be stored in conditions likely to encourage corrosion. The container valves should be tightly closed and where appropriate valve outlets should be capped or plugged.

Container valve guards or caps should be in place.

Keep containers tightly closed in a cool, well-ventilated place. Store containers in location free from fire risk and away from sources of heat and ignition. Full and empty cylinders should be segregated. Do not allow storage temperature to exceed 50°C (122°F). Return empty containers in a timely manner.

Technical measures/Precautions

Containers should be segregated in the storage area according to the various categories (e.g. flammable, toxic, etc.) and in accordance with local regulations. Keep away from combustible material.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

Professional Exposure Limit Values

Nitrogen Observations: No exposure limits were assigned to any of the components. Included in the regulation but without data values. See the regulation for more details. List.

If applicable, please refer to the extended section of the safety data sheet for more information on CSA.

Exposure controls

Engineering measures

Provide natural or mechanical ventilation to prevent oxygen deficient atmospheres below 19.5% oxygen.

Personal protective equipment

Respiratory protection: Self-contained breathing apparatus (SCBA) or positive pressure airline with mask are to be used in oxygen-deficient atmosphere. Air purifying respirators will not provide protection. Users of breathing apparatus must be trained.

Hand protection: Sturdy work gloves are recommended for handling cylinders. The breakthrough time of the selected glove(s) must be greater than the intended use period.

Eye protection: Safety glasses recommended when handling cylinders.

Skin and body protection: Safety shoes are recommended when handling cylinders.

Special instructions for protection and hygiene: Ensure adequate ventilation, especially in confined areas.

Remarks: Simple asphyxiant.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance: Compressed gas. Colourless gas

Odour: None.

Odour threshold: No data available.

pH: Not applicable.

Melting point/range: No data available.

Boiling point/range: No data available.

Flash point: Not applicable.

Evaporation rate: Not applicable.

Flammability (solid, gas): No data available.

Upper/lower explosion/flammability limit: No data available.

Vapour pressure: No data available.

Water solubility: Not known but considered to have low solubility.

Relative vapour density: 0.94 (air = 1)

Relative density: No data available.

Partition coefficient: Not applicable. (n-octanol/water)

Auto-ignition temperature: No data available.

Decomposition temperature: No data available.

Viscosity: Not applicable.

Explosive properties: No data available.

Oxidizing properties: No data available.

10. STABILITY AND REACTIVITY

Reactivity: Refer to possibility of hazardous reactions and/or incompatible materials.

Stability: Stable under normal conditions.

Possibility of hazards: No data available.

Reactions: No data available

Conditions to avoid: No data available.

Hazardous decomposition: None.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Likely routes of exposure

Effects on Eye: No adverse effect.

Effects on Skin: No adverse effect.

Inhalation Effects: In high concentrations may cause asphyxiation. Asphyxiation may bring about unconsciousness without warning and so rapidly that victim may be unable to protect themselves.

Ingestion Effects: Ingestion is not considered a potential route of exposure.

Symptoms: Exposure to oxygen deficient atmosphere may cause the following symptoms: Dizziness. Salivation. Nausea. Vomiting. Loss of mobility/consciousness. Shivering fit. Sweating. Blurred vision. Headache. Increased pulse rate. Shortness of breath. Rapid respiration.

Acute toxicity

Acute Oral Toxicity: No data is available on the product itself

Inhalation: No data is available on the product itself.

Acute Dermal Toxicity: No data is available on the product itself.

Skin corrosion/irritation: No data available.

Serious eye damage/eye: No data available.

Irritation

Sensitization: No data available.

Chronic toxicity or effects from long term exposures

Carcinogenicity: No data available.

Reproductive toxicity: No data is available on the product itself.

Germ cell mutagenicity: No data is available on the product itself.

Specific target organ systemic: No data available.

Toxicity (single exposure)

Specific target organ systemic: No data available.

Toxicity (repeated exposure)

Aspiration hazard: No data available.

12. ECOLOGICAL INFORMATION**Eco-toxicity effects**

Aquatic toxicity: No data is available on the product itself.

Toxicity to other organisms: No data available.

Persistence and degradability

Mobility: No data available.

Bioaccumulation: No data is available on the product itself.

Further information

No ecological damage caused by this product.

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused: Contact supplier if guidance is required.

Return unused product in original products cylinder to supplier.

Contaminated packaging: Return cylinder to supplier.

14. TRANSPORT INFORMATION**ADR**

UN / ID No.: UN1956

Nombre de envío adecuado: COMPRESSED GAS, N.O.S., (Nitrogen, Hydrogen)

Clase o división: 2

Código de túnel: (E)

Etiqueta (s): 2.2

Número de identificación de peligro ADR / RID: 20

IATA

UN / ID No.: UN1956

Nombre de envío adecuado: COMPRESSED GAS, N.O.S., (Nitrogen, Hydrogen)

Clase o división: 2.2

Etiqueta (s): 2.2

IMDG

UN / ID No.: UN1956

Nombre de envío adecuado: COMPRESSED GAS, N.O.S., (Nitrogen, Hydrogen)

Clase o división: 2.2

Etiqueta (s): 2.2

CTC

UN / ID No.: UN1956

Nombre de envío adecuado: COMPRESSED GAS, N.O.S., (Nitrogen, Hydrogen)

Clase o división: 2

Etiqueta (s): 2.2

Further Information

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.

15. REGULATORY INFORMATION

OSHA Hazard Communication Standard (29 CFR 1910.1200) Hazard Class(es)
Compressed Gas.

Country Regulatory list Notification

USA TSCA Included on Inventory.

EU EINECS Included on Inventory.

Canada DSL Included on Inventory.

Australia AICS Included on Inventory.

South Korea ECL Included on Inventory.

China SEPA Included on Inventory.

Philippines PICCS Included on Inventory.

Japan ENCS Included on Inventory.

EPA SARA Title III Section 312 (40 CFR 370) Hazard Classification:

Sudden Release of Pressure Hazard.

Chemical Safety Assessment

Refer to extended SDS for CSA information

This product is either exempt REACH, does not meet the minimum volume threshold for a CSA, or the CSA, or the CSA has not yet been completed.

16. OTHER INFORMATION

Ensure all national / local regulations are observed.

R-phrase (s)(Components

Hazard Statements:

H280 Contains gas under pressure; may explode if heated.

Prepared by: Argoco España

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.