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|  | SAFETY DATA SHEET | Version: 4 Revision date: 2025-04-25 |
| | Methane- Argon Mixture P10 - compressed | PG-SDS-17 |

This SDS conforms to the Globally Harmonised System (GHS), South African Regulations on Hazardous Chemical Agents, and SANS 10234, SANS 11014 & SANS 10228.

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

| | |
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| Product name | 10% Methane Balance Argon Mixture – P10 |
| Chemical Name | 10% Methane Balance Argon mixture |
| Other means of identification | P10 |
| Recommended Intended Purpose | The product is used in various applications and may include – Industrial used. Always use as intended. |
| Company Information | Puregas (Pty) Ltd PO Box 123884, Alrode, 1451, Gauteng, South Africa Tel: (011) 903 9760 Fax: (011) 903 9766 Cellphone: 082 889 6946 (1 st) 082 885 7475 (2 nd) Email: info@puregas.co.za Website: www.puregas.co.za |
| Emergency Telephone | 0800 172 743 Rapid Spill Response - 24 hours, 7 days a week |

SECTION 2. HAZARDS IDENTIFICATION

| Classification of the mixture - GHS classification as published through ECHA | | | | |
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| Hazard Classification | | Category | Hazard Statement | |
| Gases under pressure (Comp.) | | 2.2 | H280 | Contains gas under pressure; may explode if heated |
| Flammable Gas | | 1 | H220 | Extremely flammable gas. |
| Hazard Pictograms | | <div><div>GHS04</div></div> <div><div>GHS02</div></div> | | |
| Signal Word | | Danger | | |
| Precautionary Statements | | | | |
| General: | P101 P102 P103 | If medical advice is needed, have product container or label at hand Keep out of reach of children Read carefully and follow all instructions | | |
| Prevention | P202 P210 P280 | Do not handle until all safety precautions have been read and understood. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking Wear protective gloves/eye protection/face protection | | |
| Response | P377 P381 | Leaking gas fire: Do not extinguish, unless leak can be stopped safely. In case of leakage, eliminate all ignition sources | | |
| Storage | P403 P405 | Store in a well-ventilated place. Store locked up. | | |
| Disposal | | None | | |
| Main Hazard | Contains gas under pressure; may explode if heated. Methane is an extremely flammable gas. | | | |
| Other Hazards | Asphyxiant in high concentrations. | | | |

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SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

| CAS No | EC No | Name | % |
|-------------------|-----------|-------------------|-------|
| 74-82-8 | 200-812-7 | Methane | 0-10 |
| 7440-37-1 | 231-147-0 | Argon, Compressed | 99-90 |
| UN Number: | 1956 | | |

See Section 8 for Exposure Guidelines and Section 15 for Regulatory Classifications.

SECTION 4. FIRST AID MEASURES

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| In the case of inhalation | Remove the victim to fresh air and keep at rest in a position comfortable for breathing. If adverse effects occur, remove them to an uncontaminated area. Give artificial respiration if not breathing. If breathing is difficult, oxygen should be administered by qualified personnel. Get immediate medical attention |
| In case of skin contact | Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. |
| In case of eye contact | Flush eyes with plenty of water for 10 to 15 minutes |
| In case of ingestion | Not an expected route of exposure |
| Treatment (Advice to doctor) | For Inhalation, consider oxygen |

SECTION 5. FIRE-FIGHTING MEASURES

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| Fire / Explosion hazard: | Negligible fire hazard. Pressurized containers may rupture or explode if exposed to heat. |
| Suitable extinguishing media | Use extinguishing agents appropriate for surrounding fire. Use spray water to keep containers cool. |
| Unsuitable extinguishing media | None Known |
| Special protective equipment for fire-fighters | Wear full protective firefighting gear including self-contained breathing apparatus (SCBA) for protection against possible exposure. |
| Special hazards arising from the substance | Move the container from the fire area if it can be without risk. Cool containers with water spray until well after the fire is out. Withdraw immediately in case of rising sound from the venting safety device or any discoloration of tanks due to fire. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas. |

SECTION 6. ACCIDENTAL RELEASE MEASURES

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| Personal precautions | Wear personal protective clothing and equipment, see Section 8. No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Avoid breathing gas. Provide adequate ventilation. Wear an appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. |
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| Environmental precautions | Keep unnecessary people away, isolate hazard areas, and deny entry. Ensure emergency procedures to deal with accidental gas releases are in place to avoid contamination of the environment. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil, or air). |
| Methods and material for containment and cleaning up | Immediately contact emergency personnel. Stop leak if without risk. |

SECTION 7. HANDLING AND STORAGE

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| Precautions for safe handling | Avoid breathing gas. Use only with adequate ventilation Put on appropriate personal protective equipment (see Section 8). Contains gas under pressure. Do not puncture or incinerate the container. Use equipment rated for cylinder pressure. Close the valve after each use and when empty. Protect cylinders from physical damage; do not drag, roll, slide, or drop. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue and can be hazardous. |
| Hygiene | Eating, drinking, and smoking should be prohibited in areas where this material is handled, stored, and processed. Workers should wash their hands and face before eating, drinking, and smoking. |
| Requirements for storage rooms and vessels | Store and handle in accordance with all current regulations and standards. Protect from sunlight. Store in a well-ventilated area. Keep separated from incompatible substances. Outside or detached storage is preferred. Protect from physical damage. Cylinders should be stored upright with a valve protection cap in place and firmly secured to prevent falling. Keep at temperatures below 52°C / 125°F. Full and empty cylinders should be segregated. Use a "first in first out" inventory system to prevent full cylinders from being stored for excessive periods of time. |

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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| No exposure limits are available | |
| Respiratory protection | Occupational As the mixture is a simple asphyxiant, avoid exposure hazards in any areas where spillage has taken place. Only enter once testing has proved the atmosphere to be safe and remember that the gas is heavier than air. Self-contained breathing apparatus should always be worn when entering an area where oxygen depletion may have occurred. |
| Hand protection | Glove |
| Eye protection | Safety goggles, |
| Skin and body protection | Safety shoes or boots should be worn when handling containers. |
| Engineering Controls | Engineering control measures are preferred to reduce exposure to oxygen-depleted atmospheres. General methods include forced-draft ventilation, separate from other exhaust ventilation systems. Ensure that sufficient fresh air enters at or near floor level. |

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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

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|----------------------------|-------------------------------|
| Physical state | Colourless liquified gas |
| Colour | Colourless |
| Odour | Odourless |
| Taste | Tasteless |
| pH | Not available |
| Melting point | -182.5 °C (Methane) |
| Boiling point | -162 °C (Methane) |
| Auto-ignition temperature | 580°C (Methane) |
| Decomposition temperature | Not applicable |
| Flammability limits in air | 5,0 - 15,4% by vol. (Methane) |

SECTION 10. STABILITY AND REACTIVITY

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| Reactivity | None |
| Chemical Stability | Stable under normal conditions |
| Conditions to avoid | The dilution of oxygen concentration in the atmosphere to levels that cannot support life. Never expose the cylinders to excessive heat, as this may cause sufficient build-up of pressure to rupture the cylinders. |
| Incompatible materials | Oxidizing agents |
| Hazardous decomposition products. | Carbon monoxide, Carbon dioxide |

SECTION 11. TOXICOLOGICAL INFORMATION

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| Information on toxicological effects | |
| Acute toxicity: | Not classified |
| Germ cell mutagenicity: | Not classified |
| Carcinogenicity: | Not classified |
| Reproductive toxicity: | Not classified |

SECTION 12. ECOLOGICAL INFORMATION

No ecological damage was caused by this product.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods:

Disposal of the gas should only be handled by the gas supplier.

Packaging: The disposal of cylinders must only be handled by the gas supplier.

SECTION 14. TRANSPORT INFORMATION

UN Pictogram



Land and inland navigation transport ADR/RID

UN No. 1956, Shipping Name P10, Class 2.1, Subsidiary Risk flammable, non-toxic gases, Hazchem Warning 2A.

Marine transport IMDG

MDG 1956, Shipping Name P10, Class 2.1, Subsidiary Risk flammable, non-toxic gases.

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Air transport ICAO/IATA-DGR

ICAO/IATA Code 1956, Class 2.1, Packing Group: - Packaging instructions - 200

Special precautions for user

The protective measures listed in Sections 6, 7, and 8 of the Safety Data Sheet have to be considered.

SECTION 15. REGULATORY INFORMATION
Safety, health, and environmental regulations/legislation specific for the substance or mixture:

Occupational Health and Safety Act, Hazardous Chemical Agents Regulations

SANS 11014:2010 Edition 1

SANS 10228:2012 Edition 6

SANS 10234:2019 Edition 2

SUPPLEMENT TO SANS 10234 Edition 1

National Road Traffic Act

Dangerous Goods Regulations

SECTION 16. OTHER INFORMATION
SELECTED BIBLIOGRAPHY

1. Data sheets as supplied by various Suppliers and Manufacturers
2. Emergency Response Handbook - Annex A of SABS 0232-3
3. GHS Purple booklet
4. ECHA
5. Occupational Health and Safety Act, Hazardous Chemical Agents Regulations
6. SANS 11014:2010 Edition 1
7. SANS 10228:2012 Edition 6
8. SANS 10234:2019 Edition 2
9. SUPPLEMENT TO SANS 10234 Edition 1
10. National Road Traffic Act
11. Dangerous Goods Regulations

Disclaimer:

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety, and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.