

MATERIAL SAFETY DATA SHEET (MSDS)

N2+H2 Mixture Gas

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: N2+H2 Mixture Gas

Product Use: Gas manufacturing

Company Name: Indo-Ghana Industries Ltd

Address: B-6158 Dadeban Rd. North Industrial Area, Accra, Ghana

Emergency Contact: 054 431 3876

Telephone Number: 054 431 3876

Date of Preparation: 12/9/2023

SECTION 2: HAZARDS IDENTIFICATION

The N2+H2 Mixture Gas is a flammable gas mixture that may pose several hazards. It is important to handle and store it with caution to prevent accidents. Key hazards include:

- Flammable gas: The mixture is highly flammable and can form explosive mixtures with air.
- Pressure hazard: Stored under pressure, which may lead to the rupture of containers or pipelines.
- Health hazards: Exposure to high concentrations can cause asphyxiation and respiratory irritation.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

N₂+H₂ Mixture Gas typically consists of:

- Nitrogen (N₂): Approximately XX%
- Hydrogen (H₂): Approximately XX%

(Note: The exact composition may vary and should be confirmed by the manufacturer.)

SECTION 4: FIRST AID MEASURES

In case of contact with N₂+H₂ Mixture Gas, take the following first aid measures:

- Inhalation: Remove the affected person to fresh air. If breathing difficulties persist, seek immediate medical attention.
- Skin Contact: Wash the affected skin area with plenty of water.
- Eye Contact: Rinse the eyes gently with water for at least 15 minutes. Remove contact lenses if present. Seek medical attention.
- Ingestion: This gas is not intended for ingestion. If ingested accidentally, seek immediate medical attention.

SECTION 5: FIRE-FIGHTING MEASURES

- Extinguishing Media: Use dry chemical powder, foam, or carbon dioxide (CO₂) to extinguish fires involving N₂+H₂ Mixture Gas.
- Fire Hazards: This gas mixture is flammable and can ignite when exposed to an open flame or heat source.
- Firefighting Equipment: Firefighters should use appropriate protective equipment and self-contained breathing apparatus (SCBA).

SECTION 6: ACCIDENTAL RELEASE MEASURES

- Evacuation: In case of a major leak or spill, evacuate the area and isolate it from unauthorized personnel.
- Ventilation: Ensure adequate ventilation to disperse the gas.
- Personal Protective Equipment: Wear appropriate protective gear, including eye protection and respiratory protection, if necessary.
- Stop the source of the leak if safe to do so.

SECTION 7: HANDLING AND STORAGE

- Handling: Use in a well-ventilated area. Avoid contact with heat sources, open flames, or sparks. Use appropriate gas handling equipment.
- Storage: Store in a cool, dry, well-ventilated area, away from direct sunlight and incompatible materials. Store in approved containers and keep them tightly closed.
- Use appropriate signage and labeling for gas storage areas.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

- Respiratory Protection: Use appropriate respiratory protection equipment if the gas concentration exceeds safe exposure limits.
- Eye Protection: Wear safety goggles or a full-face shield when working with the gas.
- Skin Protection: Use appropriate protective clothing, including gloves and lab coats.
- Engineering Controls: Ensure proper ventilation and gas monitoring in enclosed spaces.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

- Appearance: Colorless and odorless gas
- Melting Point: Approx. -XXX °C
- Boiling Point: Approx. -XXX °C
- Density: Approx. XXX g/L at XX°C and XX atm

SECTION 10: STABILITY AND REACTIVITY

- Stability: The gas mixture is stable under normal conditions.
- Incompatibility: Avoid contact with oxidizers, strong acids, and alkalis.
- Hazardous Decomposition Products: Under extreme conditions, hydrogen can form explosive mixtures with air.

SECTION 11: TOXICOLOGICAL INFORMATION

- Acute Toxicity: The mixture may cause asphyxiation in high concentrations.
- Chronic Effects: No known chronic effects.
- Carcinogenicity: None of the components are listed as carcinogens by IARC, NTP, or OSHA.

SECTION 12: ECOLOGICAL INFORMATION

- Environmental Impact: Release to the environment should be avoided. This gas does not have significant long-term ecological effects when released into the atmosphere.

SECTION 13: DISPOSAL CONSIDERATIONS

- Dispose of empty containers and unused product in accordance with local, state, and national regulations.
- Consult with local authorities for proper disposal procedures.

SECTION 14: TRANSPORT INFORMATION

- Proper Shipping Name: Compressed Gas, Flammable, N.O.S. (Not Otherwise Specified)
- UN Number: UNXXXX
- Hazard Class: 2.1

SECTION 15: REGULATORY INFORMATION

- Follow all applicable local, state, and national regulations for the handling, storage, and transportation of N₂+H₂ Mixture Gas.

SECTION 16: OTHER INFORMATION

- This MSDS is provided as a reference for the safe handling of N₂+H₂ Mixture Gas. It does not replace the need for proper training, equipment, or adherence to applicable safety guidelines.
- For additional information, contact Indo-Ghana Industries Ltd.

Note: The information provided in this MSDS is based on the best knowledge available at the time of preparation. The composition of the gas mixture may vary, so it is essential to confirm specific details with the manufacturer.