



# Material Safety Data Sheet

FM.PRO-35

## 1. Chemical Product and Company Identification

PRODUCT NAME : **CO2 IN ARGON, COMPRESSED**  
TRADE NAME/SYNONYMS : **Mixed Gas**

COMPANY IDENTIFICATION :

**PT. BSG GASES**

**Jl. Cempaka, Desa Jatimulya  
Tambun, Bekasi - Indonesia**

EMERGENCY PHONE : **+62 21 8812507 – 08**

## 2. Composition, Information on Ingredients

COMPONENT	CONCENTRATION	FORMULA
Carbon Dioxide	10-50%	CO2
Argon	50-90%	Ar

## 3. Hazards Identification

EMERGENCY OVERVIEW : **High-pressure gas. Can cause rapid suffocation. Can increase respiration and heart rate. May cause nervous system damage. May cause dizziness and drowsiness. Self-contained breathing apparatus may be required by rescue workers. Under ambient conditions, this is a colorless gas with no odor.**

POTENTIAL HEALTH EFFECTS:

ROUTES OF ENTRY: **Inhalation**

ACUTE EFFECTS: **Asphyxiant. Effects are due to lack of oxygen. The carbon dioxide component is also physiologically active, affecting circulation and breathing. Moderate concentrations may cause headache, drowsiness, dizziness, stinging of the nose and throat, excitation, rapid breathing and heart rate, excess salivation, vomiting, and unconsciousness. Lack of oxygen can kill.**

CHRONIC EFFECTS: **None known**

## 4. First Aid Measures

INHALATION: **Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, qualified personnel may give oxygen. Call a physician**

EYE CONTACT: **Flush with water. Hold the eyelids open and away from the eyeballs to ensure that all surfaces are flushed thoroughly. If irritation persists, see a physician, preferably an ophthalmologist**

SKIN CONTACT: **Wash with soap and water. If irritation persists, seek medical attention..**

INGESTION: **None**

IN EVENT OF EXPOSURE, CONSULT A PHYSICIAN

## 5. Fire Fighting Measures

FLASH POINT: **Nonflammable**

AUTOIGNITION TEMPERATURE: **N/Av**

FLAMMABLE LIMITS: **Nonflammable**

EXTINGUISHING MEDIA: **Use what is appropriate for surrounding fire.**

SPECIAL FIRE FIGHTING INSTRUCTION AND EQUIPMENT: **Wear self-contained breathing apparatus and full protective clothing. Keep fire exposed cylinders cool with water spray. If possible, stop the product flow.**

HAZARDOUS COMBUSTION PRODUCTS: **None**

UNUSUAL FIRE AND EXPLOSION HAZARDS: **Cylinder rupture may occur under fire conditions**

## 6. Accidental Release Measures

CLEAN UP PROCEDURES: **Evacuate and ventilate area. Shut off source if possible and remove source of heat.**

SPECIALIZED EQUIPMENT: **None**

## 7. Handling And Storage

PRECAUTIONS TO BE TAKEN IN HANDLING: **Secure cylinder when using to protect from falling. Use suitable hand truck to move cylinders.**

PRECAUTIONS TO BE TAKEN IN STORAGE: **Store in well ventilated areas away from combustibles. Keep valve protection cap on cylinders when not in use.**

## 8. Exposure Controls, Personal Protection

ENGINEERING CONTROLS: **Provide adequate general and local exhaust ventilation to avoid asphyxiation.**

EYE / FACE PROTECTION: **Safety glasses**

SKIN PROTECTION: **Wear work gloves for cylinder**

handling; RESPIRATORY PROTECTION: **In case of leakage, use self-contained breathing apparatus.**

OTHER PROTECTIVE EQUIPMENT: **Safety shoes when handling cylinders.**

## 9. Physical And Chemical Properties

APPEARANCE: **Colorless**

ODOR: **Odorless**

PHYSICAL PRESSURE: **Gas**

VAPOR PRESSURE: **N/Av**

VAPOR DENSITY (AIR=1): **N/Av**

BOILING POINT (C): **N/Av**

SOLUBILITY IN WATER: **Neg**

SPECIFIC GRAVITY (H2O=1): **N/Av**

EVAPORATION RATE: **Gas**

ODOR THRESHOLD: **None**

## 10. Stability and Reactivity

STABILITY: **Stable under normal storage conditions.**

CONDITIONS TO AVOID: **Storage in poorly ventilated areas. Storage near a heat source.**

MATERIALS TO AVOID: **Alkali metals, alkaline earth metals, metal acetylides, chromium, titanium above 1022°F (550°C), uranium above 1382°F (750°C), magnesium above 1427°F (775°C).**

HAZARDOUS POLYMERIZATION: **Will not occur.**

HAZARDOUS DECOMPOSITION: **The arc may form gaseous reaction products such as carbon monoxide and carbon dioxide.**

## 11. Toxicological Information

**Not available**

## 12. Ecological Information

**Not available**

## 13. Disposal Considerations

WASTE DISPOSAL METHOD: **Dispose of non-refillable cylinders in accordance with federal, state and local regulations. Allow gas to vent slowly to atmosphere in an unconfined area or exhaust hood. If the cylinders are the refillable type, return cylinders to supplier with any valve outlet plugs or caps secured and valve protection caps in place.**

## 14. Transport Information

PROPER SHIPPING NAME: **CO2 in Argon, compressed**

HAZARD CLASS: **2.2(nonflammable)**

IDENTIFICATION NUMBER: **UN1956**

LABELING: **NONFLAMMABLE GAS**



SPECIAL PRECAUTIONS: **Cylinders should be transported in a secure upright position in a well ventilated truck.**

## 15. Other Information

OTHER PRECAUTIONS: **Protect containers from physical damage. Do not deface cylinders or labels. Cylinders should be refilled by PT. BSG GASES qualified producers of compressed gas.**