**Material Safety Data Sheets (MSDS)**

IDENTIFICATION/PHYSICAL & CHEMICAL PROPERTIES

**CARBON DIOXIDE (25%) /ARGON GAS (75%) MIXTURE**

Chemical formula:

Product Use Description: Welding Gas

**CHEMICAL AND COMMON NAMES**

Synonyms: C25

Physical State: Gas Color: colorless gas (liquid under pressure)

Odor: odorless Taste: N/A

Molecular Weight: Molecular Formula:

Boiling Point: Freezing Point:

Decompression Point: N/A Vapor Pressure:

Vapor Density (air=1): 1.65 KG/M3 Specific Gravity: 1.38

Density: Water Solubility: 3.37%

PH: N/A Volatility: critical temperature

Odor Threshold: N/A Evaporation Rate: N/A

Viscosity: N/A Coefficient of Water/Oil Distribution: N/A

Solvent Solubility: N/A

HAZARDS IDENTIFICATION

NFPA RATINGS (SCALE 0-4): HEALTH = 1 FIRE = 0 REACTIVITY = 0

Argon acts as an asphyxiant; it displaces oxygen. Oxygen levels should not fall below 18 molecular percent. Not found on carcinogen lists. Over exposure symptoms: loss of balance, dizziness, tightness in the frontal region of the forehead, tingling in the toes, fingers, tongue, affected speech, inability to utter sounds, rapid reduction in motor control, altered consciousness, loss of feeling. Argon asphyxiation may occur without warning.

COMPOSITION/INFORMATION ON INGREDIENTS

Components:Argon Carbon Dioxide

CAS Number: 744-037-1 124-38-9

Concentration (Volume): 75% 25%

FIRST AID

For inhalation, skin and/or eye contact:

**Breathing:** Inhalation. Provide fresh air, or give artificial respiration if not breathing, mouth to mouth preferred. If breathing is difficult, give oxygen. Get immediate medical attention.

**Skin:** Moister in the air could lead to the formation of carbonic acid, which can be irritating to eyes.
**Eyes:** Contact with the eyes can cause damage to the retinal ganglion cells.

FIRE FIGHTING MEASURES

Evacuate personnel. Use water spray to cool fire exposed cylinders. Use self-contained breathing apparatus. Positive pressure air line with mask or self-contained breathing apparatus should be available for emergency use.

ACCIDENTAL RELEASE MEASURES

Uncontrolled releases should be responded to by trained personnel using preplanned procedures. Proper protective equipment should be used. In case of a release, clear the affected area and protect people. Minimum personal protective equipment should be Level B – protective clothing, gloves resistant to tears and SCBA.

HANDLING AND STORAGE

 Avoid exposing cylinders to extremely high temperatures, which could cause the cylinders to rupture or burst. Cylinders should be stored in dry, well ventilated areas way from sources of heat. Compressed gases can present significant safety hazards. Store containers away from heavily trafficked areas and emergency exits. Post no smoking or open flames signs in storage or use areas. Use a check valve or trap in the discharge line to prevent hazardous back flow into the cylinder.

 EXPOSURE CONTROLS/PERSONAL PROTECTION

**VENTILATION**: Provide local exhaust ventilation system. Ensure compliance with applicable exposure limits. Maintain oxygen above 18 mol percent.

**EYE PROTECTION**: Safety glasses should be worn.

**RESPIRATORY PROTECTION:** Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard.

**SKIN PROTECTION:** No special equipment is required. Gloves are recommended for cylinder handling.

**CLOTHING**: Safety shoes. Protective clothing is not required.

STABILITY AND REACTIVITY

This gas mixture is not flammable. A cylinder rupture hazard exists when this gas mixture, which is under pressure, is subject to heat or flames.

This gas mixture is not reactive.

TOXICOLOGICAL INFORMATION

Simple asphyxiate.

ECOLOGICAL INFORMATION

Fish, invertebrate, algal toxicity: Any adverse effect on animals would be related to sxygen deficient environments. No adverse effect from this gas mixture on aquatic life is expected.

Biodegradation: This gas mixture will be dissipated rapidly in well-ventilated areas.

DISPOSAL CONSIDERATIONS

Dispose in accordance with all applicable regulations.

TRANSPOSRT INFORMATION

Proper Shipping name: Compressed gases, n.o.s. (Argon, Carbon Dioxide)

U.S. DOT CFR

ID NUMBER: UN1956

HAZARD CLASS: 2.2

LABELING REQUIREMENTS: 2.2

REGULATORY INFORMATION

**U.S. REGULATIONS**

CERCLA Sections 102a/103 Hazardous Substances (40 CFR 302.4): Not regulated

SARA Title III Section 302 Extremely Hazardous Substances (40 CFR 355 Subpart B): Not regulated

SARA Title III Section 304 Extremely Hazardous Substances (40 CFR 370 Subparts B and C): Not subject to reporting.

SARA Title III Section 313 (40 CFR 372.65): Not subject to reporting.

OSHA Process Safety (29 CFR 1910.119): Not regulated

**STATE REGULATIONS**

No products were found/this material is not listed.

**CANADIAN REGULATIONS**

WHMIS Classification: This gas mixture is classified as dangerous goods, per regulation of Transport Canada.

**NATIONAL INVENTORY STATUS**

U.S. Inventory (TSCA): Listed on inventory

TSCA 12(b) Export Notification: Listed on inventory

Canada inventory (DSL/NDSL): Listed on inventory