

Head Office: Refrigeration & Oxygen Co. Ltd.

P.O. Box 501 Safat 13006,

Kuwait

Dubai Office: Emirates Industrial Gases Co. LLC.

P.O. Box 3763, Dubai, UAE

Qatar Office: Qatar Oxygen Co. W.L.L

P.O. Box 22386, Doha, Qatar

Bahrain Office: Bahrain Medical & Industrial Gas Plant P.O.Box 80738,

Kingdom of Bahrain

Email Id: info@rocq8.com

Web Address: www.airtecgulf.com

Emergency Phone

Kuwait +965 1844 844 Dubai +971 8005414

Qatar +974 44114603/4/5

Bahrain +973 17400469/473

Facsimile Phone

Kuwait+965 2484 3020Dubai+971 42664168Qatar+974 44114350Bahrain+973 17400391

1. CHEMICAL PRODUCT

PRODUCT NAME: ARGON IN CARBON DIOXIDE SYNONYMS: None

2. COMPOSITION, INFORMATION ON INGREDIENTS

Exposure Limits (PPM)

Ingredient Name I	<u>Formula</u>	CAS#	Concentration	ACGIH TLV	OSHA PEL	MAC	Other STEL
CARBON DIOXIDE	CO2	124-38-9	1-50 PCT	5000	5000	5000	30000
ARGON	Ar	7440-37-1	BALANCE	S/A	S/A	S/A	S/A

Note: NE = NONE ESTABLISHED S/A = SIMPLE ASPHYXIANT

3. HAZARD INDENTIFICATION

* * * EMERGENCY OVERVIEW * * *

High pressure gas.
Can cause rapid suffocation.
Can increase respiration and heart rate.

POTENTIAL HEALTH EFFECTS

ROUTES OF ENTRY: Inhalation

ACUTE EFFECTS: Exposure to carbon dioxide at 1-4% concentrations result in increased respiratory volume. Concentrations greater than 4% produce labored breathing and is dangerous for even a few minutes. Mixture can act as a simple asphyxiant by displacing air necessary for life. Symptoms include rapid respiration, muscular incoordination, fatigue, dizziness, nausea, vomiting, unconsciousness, and death.

CHRONIC EFFECTS: None known

MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE: None known

OTHER EFFECTS OF OVEREXPORSURE: None

DOCUMENT CORE. LU-DO-010 LEANOT OTT 101/2014 LU-BE LU-DU-DU-DU-DU-DU-DU-DU-DU-DU-DU-DU-DU-DU	Document Code: PR-DS-015	Rev:01, 01/10/2014	Page 1 of 5
--	--------------------------	--------------------	----------------------



CARCINOGENICITY (US ONLY):

NTP - No IARC MONOGRAPHS - No OSHA REGULATED - No

4. FIRST AID MEASURES

INHALATION: Immediately remove victim to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, give artificial respiration.

EYE CONTACT: None

SKIN CONTACT: None

INGESTION: None

IN EVENT OF EXPOSURE, CONSULT A PHYSICIAN

NOTE TO PHYSICIAN: None

5. FIRE FIGHTING MEASURES

FLASH POINT: Nonflammable

AUTOIGNITION TEMPERATURE: N/Ap

FLAMMABLE LIMITS: Nonflammable

LOWER: UPPER:

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. Remove leaking cylinder to exhaust hood or safe outdoor area.

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

Document Code: PR-DS-015	Rev:01. 01/10/2014	Page 2 of 5
Document Code, FN-D3-013	NEV.U1, U1/10/2014	rage Z OI J



to move cylinders.

PRECAUTIONS TO BE TAKEN IN STORAGE: Store in well ventilated areas. 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: None

RESPIRATORY PROTECTION: Use a self-contained breathing apparatus in case of emergency or non-routine use.

OTHER PROTECTIVE EQUIPMENT: Safety shoes when handling cylinders.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Colorless

ODOR: Odorless

PHYSICAL PRESSURE: Gas

VAPOR PRESSURE: N/Ap

VAPOR DENSITY (AIR=1): .2772

BOILING POINT (C): Gas

SOLUBILITY IN WATER: v/v @20 deg. C: 0.0068

SPECIFIC GRAVITY (H2O=1): Gas

EVAPORATION RATE: Gas

ODOR THRESHOLD: N/Ap

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: This weakly acidic material will react with alkaline materials to form carbonates and bicarbonates.

HAZARDOUS POLYMERIZATION: Will not occur.

Document Code: PR-DS-015	Rev:01. 01/10/2014	Page 3 of 5
Document Code, FN-D3-013	NEV.U1. U1/10/2014	rage I 3 OI 3



HAZARDOUS DECOMPOSITION: Toxic carbon monoxide when heated above 1700 deg.C.

11. TOXICOLOGICAL INFORMATION

LETHAL CONCENTRATION (LC50): NONE ESTABLISHED

LETHAL DOSE 50 (LD50): N/Ap

TERATOGENICITY: N/Ap

REPRODUCTIVE EFFECTS: N/Ap

MUTAGENICITY: N/Ap

12. ECOLOGICAL INFORMATION

No adverse ecological effects are expected.

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

CONCENTRATION: 1-50%

DOT DESCRIPTION (US ONLY):

PROPER SHIPPING NAME: Compressed gases, n.o.s.

HAZARD CLASS: 2.2 (nonflammable)
INDENTIFICATION NUMBER: UN1956
REPORTABLE QUANTITIES: None
LABELING: NONFLAMMABLE GAS

ADR / RID (EU Only): Class 2, 1A

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

15. REGULATORY INFORMATION

OSHA: Process Safety Management: Materials are not listed in appendix A of 29 CFR 1910.119 as highly hazardous chemicals.

TSCA: Materials are listed in TSCA inventory.

|--|



SARA: The threshold planning quantity for this mixture is 10,000 lbs.

EU NUMBER: N/Av

NUMBER IN ANNEX 1 OF DIR 67/548: Mixture is not listed in annex 1.

EU CLASSIFICATION: N/Av

R: As

S: 9,23

16. OTHER INFORMATION

OTHER PRECAUTIONS: Protect containers from physical damage. Do not deface cylinders or labels. Cylinders should be refilled by qualified producers of compressed gas. Shipment of a compressed gas cylinder which has not been filled by the owner or with his written consent is a violation of federal law (49 CFR).

ABBREVIATIONS: N/Ap - Not Applicable N/Av - Not Available SA - Simple Asphyxiant NE - None Established

Use proper connections; do not use adapters. Do not force fit!!

DISCLAIMER

The information and recommendations in this Material Safety Data Sheet relate only to the specific material mentioned herein and do not relate to use otherwise ie.in combination with any other material or in any process.

The information and recommendations herein are taken from our extensive experiences and the data contained in recognized references and believed by us to be true. Refrigeration group of companies make no warranties either expressed or implied with respect there to and assume no liability in connection with the use of such information and recommendation.