



**ELLENBARRIE
INDUSTRIAL GASES LTD**

REGD. OFFICE : 3A RIPON STREET KOLKATA 700 016. INDIA
PHONES : 2229-1923/6723/3097, 2249-1922
FAX : 91 (033) 2249-3396. E-mail : ellenbarrie@vsnl.com

MATERIAL SAFETY DATA SHEET

1. COMPANY IDENTIFICATION AND PRODUCT IDENTIFICATION

Ellenbarrie Industrial Gases Ltd.
3A, Ripon Street
Kolkata – 700 016
West Bengal
India

PLANTS :

- 1) D-25 Industrial Area
Kalyani, Dist.-Nadia
West Bengal - 741235
- 2) National Highway No.6
Opposite WBIIDC Growth Centre
Uluberia, Dist. – Howrah
West Bengal

Product Details : Argon, Liquid / Gaseous.
Chemical Family : Inorganic, Gas
Chemical Name : Argon
Common Names / Synonyms : LAR, Liquid Argon, Argon, Compressed Argon, Argon Gas..

2. COMPOSITION

Argon : 99.5% to 99.9998%

3. HAZARDS IDENTIFICATION

- a) **Characteristics** : Colourless gas, odorless. Non-toxic and Non-flammable.

- b) **Physical Hazards** : Containers may rupture or explode under excessive pressure and / or if exposed to heat.

- c) **Potential Health Effects** : Simple Asphyxiant, Exposure may cause irritation, nausea, difficulty in breathing, dizziness, vomiting. Headache, tingling sensation, convulsions, Coma.

Contact with Liquid form may cause blisters or frostbite.

Contact with evaporating Liquid may cause tissue freezing.

4. FIRST AID

Inhalation : Remove to uncontaminated area. Get medical attention.

Skin Contact : If frostbite or freezing occur, flush with lukewarm water. Get immediate medical attention.

Eye Contact : Remove to uncontaminated area. Open eyelids wide to allow liquid to evaporate. Get Medical attention.

5. FIRE FIGHTING

- a) **Fire and Explosion Hazards** : Non-flammable. Containers may rupture violently from pressure when involved in a fire situation.
 - b) **Extinguishing Media** : None required.
 - c) **Fire Fighting Instructions** : Firefighters should wear respiratory protection. Move the container from fire area if it can be done without risk. Continue to cool fire-exposed cylinders until well after flames are extinguished.
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6. ACCIDENTAL RELEASE MEASURES

Evacuate people from affected area. If leak is in users' equipment, purge with inert gas before attempting repairs.

7. HANDLING AND STORAGE

Liquid Argon cannot be handled in Carbon or low alloy steel. Stainless Steel and Copper are acceptable.

Store in a cool, Dry place with adequate ventilation.

Never carry a compressed Gas Cylinder or a container filled with Cryogenic Liquid in an enclosed space. A leak can result in a fire, explosion or toxic exposure.

8. PHYSICAL AND CHEMICAL PROPERTIES

<u>PARAMETER</u>	<u>ATTRIBUTE / VALUE</u>
Physical State	Cryogenic Liquid / Gas
Colour	Blue / Colourless
Odor	Odorless
Molecular Weight	31.9988
Molecular Formula	Ar
Boiling Point	-185.9°C (302.6°F)
Freezing Point	-189.4°C (308.9°F)
Vapour Pressure	Not available
Vapour Density (Air = 1)	1.38
Specific Gravity	Not applicable
Solubility (H ₂ O)	slight
PH	Not Applicable

9. EXPOSURE CONTROLS

Engineering Controls: Use local exhaust to prevent concentration in air beyond Oxygen level of 19.5%.

Eye Protection: Wear splash resistant safety goggles where contact with Liquid is possible. Eye protection not required for gas.

Skin Protection: Insulated gloves recommended for Liquids.

Other Protection: Safety shoes, Safety footwear.

10. STABILITY AND REACTIVITY

Stability : Stable

Incompatibilities : None

Polimerization : Will not occur.

11. TOXOLOGICAL INFORMATION

No significant toxic effects.

12. ECOLOGICAL INFORMATION

Not Applicable.

13. DISPOSAL CONSIDERATION

Do not attempt to dispose off residual or unused quantities. Close valve tightly after use.

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