ELLENBARRIE
INDUSTRIAL GASES LTD
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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 : Acetylene.

Chemical Name : Acetylene

Common Names / Synonyms : Acetylene, Dissolved Acetylene, Ethyne, DA

2. COMPOSITION

Acetylene : 95.0% to 99.6%

3. HAZARDS IDENTIFICATION

a) Characteristics : Flammable colourless gas slight garlic odor.

b) Physical Hazards : Dangerous fire and explosion hazard – avoid heat sparks and flame. Highly flammable under pressure. Spontaneously combustible in air at pressure above 15 Psi. Contents under pressure. Containers may rupture or explode under excessive pressure and / or if exposed to heat.

c) Potential Health Effects : Simple asphyxiant; may cause asphyxia if released in confined area. May cause anesthetic effect.

4. FIRST AID

Inhalation : Remove to uncontaminated area. Prompt medical attention. In case of over exposure, give artificial respiration or administer Oxygen.

Skin Contact : Skin affects are not likely wash affected area with soap and warm water. Get Medical Oxygen.

Eye Contact : None; If direct contact with pressurized material occurs, flush with low pressure cool water opening eye lids. Get medical attention.

5. FIRE FIGHTING

a) **Fire and Explosion Hazards** : Acetylene is spontaneously combustible in air at pressure above 15 Psi. Containers may rupture violently from pressure when involved in a fire situation.

b) **Extinguishing Media :** Carbon Di Oxide, Dry Chemical.

c) **Fire Fighting Instructions :** Always extinguish a fire before closing the cylinder valve.. 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. Fire fighters should wear respiratory protection. Aglove or heavy cloth or any wet material slapped on the flame will frequently extinguish it.

6. ACCIDENTAL RELEASE MEASURES

Extinguish all ignition sources. No smoking, flames, flares or spark in hazard area. Remove cylinder if possible and cool down with water hose. Open valve slowly ro let the acetylene escape. Close valve when empty.

Evacuate people from affected area. Presence of any combustible of flammable materials may cause a fire or explosion. If leak is in users' equipment, purge with inert gas before attempting repairs.

7. HANDLING AND STORAGE

Fusible plugs be inspected for any defect / leakage. Always keep the cylinder vertical. Do not drag, slide or roll cylinder on their sides. Do not attempt to repair or alter cylinder.

Post **'No Smoking'** signs in storage and handling areas.

Store in a cool, Dry place with adequate ventilation. Keep separated from inflammable substances.

8. PHYSICAL AND CHEMICAL PROPERTIES

PARAMETER	ATTRIBUTE / VALUE
Physical State	Gas
Colour	Colourless
Odor	Distinctive garlic like odor
Molecular Formula	C_2H_2
Boiling Point	-118.8°F (-83.8°C)
Freezing Point	-113°C (-80.6°C)
Vapour Pressure	635psia
Vapour Density (Air = 1)	Not available
Specific Gravity	0.906
Solubility (H2O)	Soluble
PH	Not Available

9. EXPOSURE CONTROLS

Engineering Controls: Use local exhaust to prevent accumulation and maintain oxygen level above19.5%; Electrical connections should be flame proof.

Eye Protection: Wear safety goggles Eye protection as appropriate..

Skin Protection: PVC or rubber gloves.

Other Protection: Safety shoes, Respiratory protection.

10. STABILITY AND REACTIVITY

Stability : Unstable; Do not allow free gas to exceed 15 Psig; Do not expose cylinder to sudden shock or heat. Acetylene may decompose violently with cylinder failure.

Incompatibilities : Oxygen and other Oxidisers including all halogens and halogen compounds – Forms explosive acetylide with Copper Mercury, Silver.

Polimerization : Temperature as low as 121°C (250°F) at high pressure are sufficient to initiate polymerisation reaction. The process may liberate heat and may lead to ignition and decomposition of acetylene.

11. TOXOLOGICAL INFORMATION

Low concentration (10-20%) cause symptoms similar to that of being intoxicated.

12. ECOLOGICAL INFORMATION

Not Applicable.

13. DISPOSAL CONSIDERATION

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

DISCLAIMER :

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