



## M A T E R I A L   S A F E T Y   D A T A   S H E E T

<b><u>Identification of substance</u></b>  C <sub>2</sub> H <sub>2</sub>	<b>Trade Name</b>  Dissolved Acetylene <b>DA</b>	<b>Manufacturer:</b> OXYGASES LLC. PO Box - 89968, AL Ghail Industrial Zone, R.A.K, U.A.E.  <small>EMERGENCY TELEPHONE NUMBER +971 7 2216029, +971 50 235 3677</small>
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### **General**

Acetylene is a highly flammable and colorless gas. It has a garlic-like odor. It poses fire and explosion hazards at very low concentrations. Acetylene is an unstable gas and is filled in cylinders packed in a porous mass. Generally it is supplied as Dissolved Acetylene. Special care is required during examination and filling the cylinder. Commercial production of Acetylene is done using Calcium Carbide.

### **Applications**

Acetylene when mixed with Oxygen burns violently and produces an extremely hot flame. It is used very commonly for metal cutting in the steel industry. Acetylene produces a highly luminous flame. In line with these characteristics, following are the most common applications:

- Metal Fabrication
- Atomic Absorption
- Marine Lighting

### **Hazards Identifications**

#### **Hazard description:**

Highly flammable



Dissolved Acetylene gas is extremely flammable.



The gas is lighter than air, and may spread long distances. Distant ignition and flash back are possible. Acetylene gas may decomposes explosively at elevated temperatures and pressures. It can form very explosive metallic salts such as with copper and silver.



**Information pertaining to particular dangers for man and environment:**

Heating may cause an explosion.

Highly flammable.

Danger	Warning
<div style="text-align: center;">  <p>Extremely flammable gas.</p> </div>	<div style="text-align: center;">  <p>Contains gas under pressure; may explode if heated.</p> </div>

**Prevention:**

Keep away from heat/sparks/open flames/hot surfaces - No smoking.

**Response:**

Leaking gas fire: Do not extinguish, unless leak can be stopped safely.

Eliminate all ignition sources if safe to do so.

**Handling and Storage:**

Close valve after each use and when empty. Cylinders must not be recharged except by or with the concern of owner. Acetylene cylinders should be stored upright and be firmly secured to prevent falling or being knocked over. Keep the quantity stored as small as possible.

**First Aid Measures:**

After inhalation : Supply fresh air; consult doctor in case of complaints.

After skin contact : Generally the product does not irritate the skin.

After eye contact: Rinse opened eye for at least 15minutes under running water.

Then consult a doctor.

After swallowing: Not applicable



### **Fire Fighting Measures:**

Suitable extinguishing agents:

CO2, powder or water spray. Fight larger fires with water spray alcohol resistant foam.



or

### **Protective Equipment:**

Wear self-contained respiratory protective device.

### **Transport Information**

DOT Hazard Class Flammable Gas 2.1

DOT Identification Number UN1001

### **Physical and Chemical Properties**

Appearance	Colour less
Odor	Ethereal Odor
Physical Pressure	Gas
Vapour Pressure	@20 Deg C, 43.21atm
Vapor Density (Air = 1)	0.91
Boiling Point	-84
Solubility in water	@25 Deg C 0.94%
Specific Gravity (H <sub>2</sub> O =1)	Gas
Evaporation Rate	Gas
Odor Threshold	Not Available