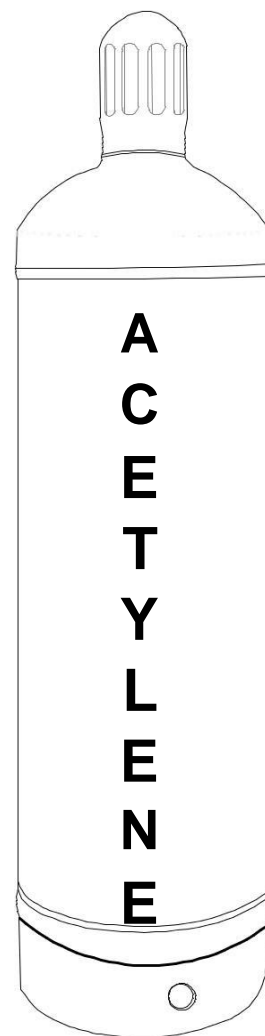


## Safe Handling & Use of Acetylene Cylinders

1. I am a cylinder containing a highly flammable gas called Acetylene. Above approximately 1 bar (15 psig) it can decompose and detonate violently without even a source of ignition. That is why regulators for Acetylene should not be set higher than 1 bar (15 psig) pressure.
2. Acetylene gas is colourless and has a characteristic garlic-like smell. It is slightly lighter than air, highly flammable and can generate an explosive atmosphere at concentrations above 2.3% in air. Very little energy is required to ignite an Air/Acetylene mixture.
3. I contain a porous (sponge-like) mass with many tiny pores which are saturated with solvent, into which the Acetylene is dissolved. This is the reason you will sometimes hear Acetylene called "Dissolved Acetylene".
4. Your supplier of Acetylene will conduct a visual pre-fill inspection as well as any legally required periodic inspections to ensure my continued safety and fitness for service.
5. It is extremely important to maintain proper solvent (Acetone or Dimethylformamide - DMF) levels inside me in order to ensure the safety of all persons handling, using or filling me. Your supplier of Acetylene weighs me before re-filling to ensure there is adequate solvent contained inside me to safely contain the Acetylene to be added. The supplier will add solvent as required. A small amount of solvent is lost during normal use of an Acetylene cylinder this is unavoidable due to the volatility of solvent.
6. Always connect me with flashback arrestor in case of a back fire.
7. If I become hot, stay at a safe distance from me and cool me down with water spray for several hours. I am fitted with a fusible metal plug (which melts at approx. 100°C) pressure relief device that will release Acetylene in the event of an abnormally high temperature.



8. If I am leaking, ventilate the area around me and discontinue use of any open flames in the area. Close the cylinder valve. If the leak has stopped, take me out of service, mark me as a leaking cylinder and inform the supplier. If I continue to leak, ventilate the room by opening doors and windows. Avoid ignition sources such as electrically operated fans and arrange for the cylinder to be collected.
9. Do not drop me as I am shock sensitive.
10. If I become non useable, please return me to gas supplier for safe disposal as per regulation. Do not send me to scrap companies directly.

The following measures will help to minimize solvent loss and keep me safe

1. Do not ship me in the horizontal position. This will bring the solvent up to my valve so that solvent will come out along with Acetylene when my valve is opened.
2. If I am lying down, let me stand upright for at least 30 minutes before using me. This will let the solvent settle back down towards the bottom away from the valve. When I'm used, only a minimal amount of solvent will come out with the Acetylene.
3. If possible, keep me out of direct sunlight and as cool as possible as solvent is very volatile (easily converts from liquid to vapor). Keeping me as cool as possible will help to minimize losses.
4. Close my valve when you are not using me and replace the valve protection cap whenever transporting or sending me for refilling.

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