



CRYO-STORAGE AND TECHNOLOGIES (CST)

Integrity ▣ Innovation ▣ Excellence ▣ Dedication

SafetyAlert-14

Don't Turn a Cylinder Into a Rocket

General

A standard industrial gas cylinder containing 330 cubic feet of gas at a pressure of 2640 psig can, after a cylinder valve is broken off, become a rocket attaining a speed of several miles per hour in a fraction of a second after the gas begins venting from the broken cylinder connection.

Important Precautions

The following precautions should be taken to prevent accidents with cylinders.

1. When storing cylinders, secure them to a wall or vertical support by means of restraining straps or chains.
2. When moving cylinders, use a cylinder cart with a chain restraint in place. Do not drag cylinders.
3. When transporting cylinders, use an open vehicle and secure them.
4. Valve protection caps should be installed on cylinders at all times when not in use.
5. Cylinders should never be dropped, rolled, or carried in a horizontal position as the cylinder valve may be broken off.
6. Cylinders should never be used as rollers for moving equipment
7. If a cylinder or cylinder valve is leaking, call the CST 24-hour Emergency Response number: 410-982-6585.

If the leak is in the user's system, close the cylinder valve, vent the pressure, and purge with an inert gas before attempting repairs.

8. Segregate cylinders in storage as to type of gas and whether empty or full, and maintain a distance of 20 feet between cylinders containing oxidizers and cylinders containing flammables.
9. Smoking is prohibited in the vicinity of cylinders containing flammable gases or oxidizers.
10. **NEVER** stick anything into the cylinder cap holes in an attempt to loosen the cap. Use an adjustable strap wrench to remove stuck caps. If the cap is still difficult to remove, attach a tag or label to the cylinder identifying the problem and return the cylinder to the supplier.
11. Wrenches should not be used on valves equipped with a handwheel. If the valve is difficult to operate or faulty, contact your supplier to arrange return of the cylinder.

NOTE: Item 1 does not apply to cylinder charging facilities.

The back of this document can be used as a poster for your cylinder storage area.

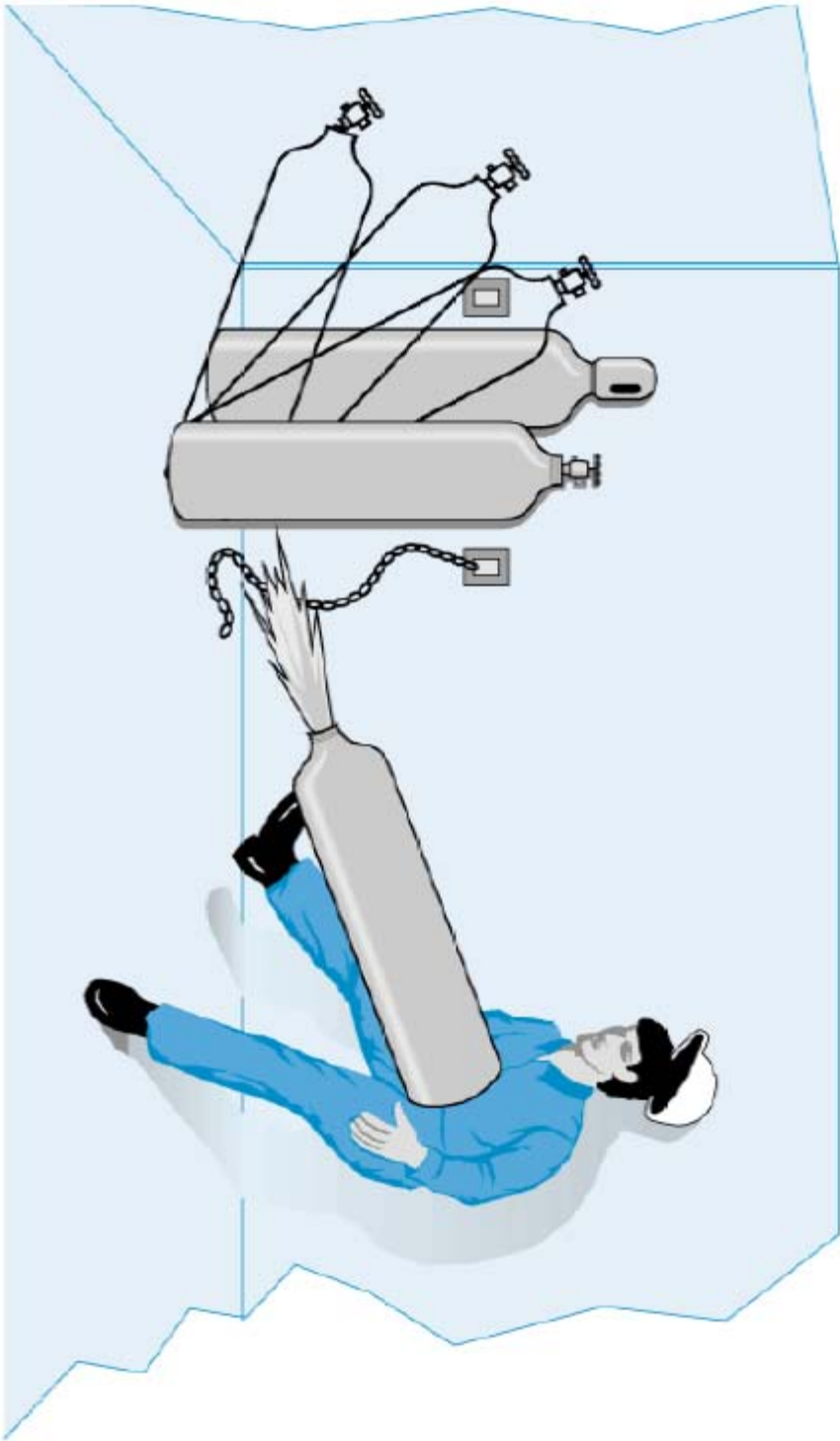
Information Sources

- Compressed Gas Association
1725 Jefferson Davis Highway, Suite 1004
Arlington, VA 22202-4102
Phone: 1-703-412-0900
- National Fire Protection Association
1 Batterymarch Park, P.O. Box 9101
Quincy, MA 02269-9101
Phone: 1-800-344-3555



Responsible Care
A Public Commitment

Don't turn a cylinder into a rocket!



Secure and cap cylinders when not in use.

Emergency Response Telephone Numbers

USA

CHEMTRAC

1-800-424-9300 (Toll Free in the U.S., Canada, and U.S. Virgin Islands)
703-527-3887 for calls originating elsewhere (Collect calls are accepted)

CHEM-TEL, INC.

1-800-255-3924 (Toll Free in the U.S., Canada, and U.S. Virgin Islands)
813-248-0585 for calls originating elsewhere (Collect calls are accepted)

INFOTRAC

1-800-535-5053 (Toll Free in the U.S., Canada, and U.S. Virgin Islands)
352-323-3500 for calls originating elsewhere (Collect calls are accepted)

3E COMPANY

1-800-451-8346 (Toll Free in the U.S., Canada, and U.S. Virgin Islands)
760-602-8703 for calls originating elsewhere (Collect calls are accepted)

NATIONAL RESPONSE CENTER (NRC)

Call NRC (24 Hours)

1-800-424-8802 (Toll Free in the U.S., Canada, and U.S. Virgin Islands)
202-267-2675 in the District of Columbia

MILITARY SHIPMENTS

703-697-0218 Explosives/Ammunition Incidents (Collect calls accepted)
1-800-851-8061 All other dangerous goods incidents

NATIONWIDE POISON CONTROL CENTER (United States Only)

1-800-222-1222 (Toll Free in the U.S.)

CANADA

CANUTEC

613-996-6666 (Collect calls are accepted)
*666 Cellular (In Canada only)

Visit Web Site: www.cstusa.biz for further information

or

Call 410-982-6585

or

Ask your local sales representative