

Safety Note #18

## GENERAL COMPRESSED GAS SAFETY



The United States Bureau of Labor Statistics reports that 20 deaths and 6,000 injuries occur due to compressed gas accidents each year. Compressed gases can be toxic, corrosive, or flammable and may act as an asphyxiant. In addition, compressed gas cylinders pose physical hazards because they are usually heavy and unwieldy and when improperly moved or tipped over may cause back injuries or smashed fingers/toes, respectively. If punctured or unintentionally breached, compressed gas cylinders may explode or become uncontrolled projectiles. ***This safety note is to be used in conjunction with the compressed gas safety video (E-051) available for loan from the ANR Environmental Health & Safety Library.***

### Compressed Gas Regulations

- California Fire Code, Sections 7401 through 7404 and 8001.4, and California Code of Regulations Title 8, Sections 3301 and 4650 address the safe storage, use, and handling of compressed gases.

### Safe Compressed Gas Practices

- Never rely on the cylinder color to identify the compressed gas. Always read the cylinder label. Return unidentified cylinders to the vendor.
- All compressed gas cylinders must remain upright.
- Leave protective caps on cylinders until the compressed gas is used.
- All compressed gas cylinders must be restrained with either chains, brackets, or straps positioned across at least the upper third portion of cylinders and preferably, also across the base of cylinders.
- Always use a regulator that is compatible with the type of compressed gas being used.
- Never store oxygen cylinders near highly combustible materials or flammable gases.
- Do not store compressed gas cylinders in unventilated enclosures such as cabinets.
- Never use compressed gas cylinders as rollers or supports, even if the cylinder is empty.
- Do not place compressed gas cylinders on soil or unimproved surfaces.
- Valves of empty compressed gas cylinders shall be closed and empty cylinders shall be marked as empty.
- Always remove regulators and replace protective caps before moving compressed gas cylinders.
- Never roll or walk a compressed gas cylinder. When moving compressed gas cylinders, always use a hand truck.
- Always close compressed gas cylinder valves, bleed regulators and lines, and close regulators when finished working with the compressed gas.