

13. Compressed Gas Cylinders

- 13.01. Cylinder contents shall be identified by a decal, label, tag, or stenciling (all referred to herein as labeling). If an identifying label is lacking or not legible, return the container to the supplier, unused.
- 13.02. Industrial gas containers are equipped with outlet connections that are in accordance with “Compressed Gas Association’s” standard for “Compressed Gas Cylinder Valve Outlet and Inlet Connections.” Such fittings are designed to prevent the connection of a gas container to a gas system with an incompatible gas. Never circumvent this protection by utilizing adapters.
- 13.03. Never abuse gas cylinders by using them for rollers, blocks, striking arcs, etc.
- 13.04. Never attempt to lift cylinders by the valve protection cap.
- 13.05. Always move large cylinders with a hand-truck specially designed for transporting cylinders.
- 13.06. Do not store or transport compressed gases in closed vans or automobiles.
- 13.07. Always secure cylinders in transit or in storage to insure against their tipping over.
- 13.08. Always use a pressure reducing regulator that is properly conditioned for the gas being used.
- 13.09. Never attempt to transfer gas from one cylinder to another, or mix any gases in a cylinder.
- 13.10. Storage Requirements
 - 13.10.01. Store all cylinders in designated areas that are secured.
 - 13.10.02. Flammable toxics and Oxygen (or any Oxidizer) shall be separated from each other by a distance of at least 20 feet, or by a non-combustible barrier at least 5 feet high having a fire resistance rating of at least one-half hour. Inert gases (Argon, Nitrogen, Helium, Carbon Dioxide), since they are chemically inert and compatible with all other gases, may be used within the separation distance.
 - 13.10.03. Outdoor storage shall be kept clear of dry vegetation and combustible materials for a minimum distance of 15 feet.
 - 13.10.04. Cylinders stored outside shall not be placed on the ground (earth) or on surfaces where water can accumulate.
 - 13.10.05. Storage areas shall be provided with physical protection from vehicle damage.
 - 13.10.06. Do not store cylinders near elevators, truck loading platforms, gangways, or under operating cranes, or other areas where they can be damaged by falling objects.
 - 13.10.07. Cylinders shall not be exposed to temperatures in excess of 125F.
 - 13.10.08. Smoking and open flames shall not be permitted in Oxygen and flammable gas storage areas or within 20 feet of such areas.
 - 13.10.09. Observe local codes limits set for the storage of flammable gases in buildings.
- 13.11. Transportation of Cylinders

- 13.11.01. When transporting compressed gas cylinders, the following rules shall be followed at all times:
- 13.11.01.01. Ensure cylinders are properly labeled as to the contents;
 - 13.11.01.02. Regulators shall be removed and valve protection caps put in place before the cylinder is moved;
 - 13.11.01.03. Do not lift or move the cylinder by the cap;
 - 13.11.01.04. Do not subject cylinders to rough handling or abuse;
 - 13.11.01.05. Cylinders should only be transported in freight/cargo elevators only, not on passenger elevators;
 - 13.11.01.06. Never roll or drag a cylinder when transporting;
 - 13.11.01.07. Firmly secure and move cylinders with a suitable hand truck, lift truck, or crane with a cradle or platform;
 - 13.11.01.08. Always secure cylinders with a strap or chain when using a designated cart; and
 - 13.11.01.09. Only one cylinder should be handled at a time unless a two cylinder cart is used and each cylinder is restrained by its own chain.