GAS CYLINDER SAFETY

Gas cylinders require special safety precautions. Know what the chemical is inside the cylinder in order to work with it safely. Be aware of the mechanical hazards associated with keeping the chemical under pressure in a metal cylinder.

Chemicals contained in gas cylinders may be flammable, corrosive, poisonous, inert, or a combination of any of these. Read the Material Safety Data Sheet (MSDS) for the chemicals in each cylinder you store and use. Understand the concentration of the chemical, the amount, and the storage pressure to work with it safely.

The MSDS should provide you information on proper storage and segregation of gas cylinders according to their contents. Make sure the cylinder is properly labeled with its contents. All gas lines and tubing should also be labeled with the contents. If needed, post warning signs around the work area such as “No Smoking” or “Explosive,” according to recommendations from the MSDS.

Because gas cylinder chemicals are contained under pressure in a heavy, metal container, they can become bombs or rockets if they are knocked over or damaged. Inspect your cylinders frequently to ensure that the tubing, regulators and valves are all seated and functioning properly. Monitor for leaks or damage to cylinders and their parts. If damaged, move to a safe spot and notify the manufacturer. Tag empty and damaged cylinders for easy identification.

Handle cylinders carefully. When you move them, make sure they are secured to the cart, dolly, or vehicle so that they don’t accidentally fall over. Always disconnect pipes/tubing and install the cover cap before moving a cylinder. Use safety glasses when connecting and disconnecting compressed gas regulators and lines. Secure the cylinders in a vertical position when you install them to ensure that they don’t get knocked over during use or due to seismic activity.

Content Source: Occupational Safety and Health Administration (OSHA) (Users of Safety Talk are advised to determine the suitability of the information as it applies to local situations and work practices and its conformance with applicable laws and regulations.)