



COMPRESSED GAS ASSOCIATION, INC.

SAFETY BULLETIN

SB-14—2003

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HELIUM GAS FOR FILLING BALLOONS

The proper handling, storage, and operation of regulating equipment and cylinders of helium is required to fill balloons safely. This bulletin is intended to give a general listing of DO NOTs and DOs for the safe handling, storage, and use of helium for filling balloons.

DO NOTs

1. DO NOT store or use helium in poorly ventilated, confined areas. Helium (balloon gas) is odorless and nontoxic, BUT MAY CAUSE SUFFOCATION.

WARNING: *Death may occur by diluting the air and reducing the concentration of oxygen in air to levels below those necessary to support life.*

2. DO NOT breathe *any* helium because it could cause serious damage to your lungs or death.
3. DO NOT store or use cylinders near extreme heat or near electrical devices. No part of a cylinder should be subjected to a temperature above 125 °F (51.7 °C).
4. DO NOT remove the valve protection cap until the cylinder has been secured for use.
5. DO NOT attempt to remove stuck or jammed protective caps. Attach to the cylinder a tag or label identifying the problem and return the cylinder to the supplier.
6. DO NOT allow children or unqualified people to operate the balloon filling equipment.
7. DO NOT attempt to transfer helium from a cylinder into any other container.
8. DO NOT use the gas from any cylinder unless there is a proper, readable product identity label or tag attached to it that specifies the gas as helium. If doubt exists, return the cylinder to the gas supplier.
9. DO NOT use hydrogen gas as a substitute for helium balloon gas because it is highly flammable and could cause an explosion, fire and burns.
10. DO NOT direct the gas at people or put skin or a body part against the outlet.

CAUTION: *Following are additional precautions for high pressure rechargeable cylinders and cylinders without gas regulating apparatus in the valve.*

11. DO NOT open the cylinder valve before attaching a balloon filling helium regulator to it.
12. DO NOT USE LEAKING EQUIPMENT. If connection is leaking, close cylinder valve, bleed system, retighten connection, and retest for leaks. If still leaking, tag and notify supplier for instructions.

DOs

1. DO read and ensure that you understand the information available and provided on the helium material safety data sheet. Ensure that personnel are properly trained in the use of helium filling equipment.
2. DO read and observe the safety precautionary statements on the cylinder label.

3. DO store and use helium cylinders in a well-ventilated area, and transport only in ventilated vehicles.
4. DO store and use cylinders in a secured position so they cannot be knocked over, such as chaining or tying the cylinder to a fixed post or cylinder cart suitable for this purpose.
5. DO close the cylinder valve after each use and when empty.
6. DO use the cylinder only for balloon filling and for no other purpose.
7. DO use a regulator device designed for balloon helium filling operations at all times. If questions arise regarding the suitability of a regulator, contact your gas supplier.
8. DO check connections for leaks after the balloon filling device has been connected to the cylinder and tightened with a wrench. Use a compatible leak test solution as advised by a gas supplier.

CAUTION: *Following is an additional precaution for high pressure rechargeable cylinders and cylinders without gas regulating apparatus in the valve.*

9. DO close the cylinder valve, remove the detachable regulator, and replace the valve protection cap before transporting the cylinder.

Additional references:

CGA P-1, *Safe Handling of Compressed Gas in Containers*, Compressed Gas Association, Inc., 4221 Walney Rd., 5th Floor, Chantilly, VA 20151. www.cganet.com

CGA P-9, *The Inert Gases—Argon, Nitrogen, and Helium*, Compressed Gas Association, Inc., 4221 Walney Rd., 5th Floor, Chantilly, VA 20151. www.cganet.com

CGA PS-7, *CGA Position Statement on the Safe Transportation of Cylinders in Vehicles*, Compressed Gas Association, Inc., 4221 Walney Rd., 5th Floor, Chantilly, VA 20151. www.cganet.com

CGA SB-2, *Oxygen-Deficient Atmospheres*, Compressed Gas Association, Inc., 4221 Walney Rd., 5th Floor, Chantilly, VA 20151. www.cganet.com

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