



COMPRESSED GAS ASSOCIATION, INC.

SAFETY BULLETIN

SB-38—2007

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GUIDANCE FOR THE SAFE TRANSPORTATION OF MEDICAL OXYGEN FOR PERSONAL USE ON BUSES

The Compressed Gas Association recommends that bus operators take the following precautions to ensure that medical oxygen being transported for passengers' personal health care use is safely handled and transported.

General information

Personnel, including bus drivers who handle containers, should be trained in the safe handling and storage of compressed gases in containers.

Oxygen should be transported on a bus only when medically necessary.

Oxygen should be transported in a high pressure cylinder or liquid oxygen ambulatory container maintained in accordance with the filler and/or container manufacturer's instructions. The filler and/or container manufacturer's instructions and precautions usually are printed on a label attached to the cylinder or liquid oxygen ambulatory container.

Limit the number of cylinders and containers to be transported on board the vehicle to the extent practicable. If possible, transport in the passenger compartment should be limited to one cylinder or liquid oxygen ambulatory container per individual requiring supplemental oxygen.

Cylinders or containers used for medical oxygen are susceptible to valve and/or body damage if dropped. Handle these cylinders or containers with care during loading and unloading operations. Never drag or roll a cylinder or container. Never carry a cylinder or container by the valve or regulator. Use an approved cylinder cart, or carry the cylinder or container carefully using both hands.

Do not handle oxygen cylinders or apparatus with hands or gloves contaminated with oil or grease.

Valves should be protected against damage.

Oxygen released from a cylinder can create an oxygen-enriched atmosphere that will support combustion and can accelerate a fire, which will burn hotter and faster than in air. Each cylinder should be secured away from sources of heat, electrical sources, or potential sparks.

Smoking or open flames shall not be permitted under any circumstances where medical oxygen is present.

When the destination is reached, immediately remove all cylinders from the bus.

For transportation in the passenger compartment

In addition to the general information, bus operators should take the following precautions:

- Before boarding, inspect each high pressure cylinder including around the valve area and pressure relief device (PRD) to ensure that it is not leaking. Listen for leaks; do not load leaking cylinders on the bus. Visually inspect the cylinders for physical damage. A cylinder that is damaged should not be transported;
- Before boarding, inspect each liquid oxygen ambulatory container to ensure that it is not leaking. Liquid oxygen ambulatory containers periodically vent through a PRD designed to ensure the container does not

become overpressurized; listen for leaks other than this normal periodic venting. Do not load leaking containers on the bus. Visually inspect the container for physical damage. A liquid oxygen ambulatory container that is damaged should not be transported;

- Each cylinder should be secured to prevent movement and leakage. “Secured” means that the cylinder is not free to move when the vehicle is in motion. Liquid oxygen ambulatory containers should be maintained in an upright position; and
- Oxygen cylinders or other medical support equipment should never be stored or secured in the aisle. Make sure that the seating of the passenger requiring oxygen does not restrict access to exits or use of the aisle.

For transportation in the cargo compartment

Additionally, bus operators should take the following precautions for cargo compartments:

- Each cylinder should be placed in a box or crate and secured against movement;
- The cargo storage area shall not subject the cylinders to temperature extremes outside the range identified on the cylinder label;
- Combustible material should not be stored in the same cargo compartment as high pressure cylinders; and
- Liquid oxygen shall not be stored in cargo compartments.

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