



COMPRESSED GAS ASSOCIATION, INC.

SAFETY ALERT

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PORTABLE CRYOGENIC CYLINDER CONNECTIONS AND LABELS

In recent years an increased amount of medical and industrial gas is being delivered in portable cryogenic vessels or dewars, most commonly the TC/DOT 4L series of cylinders.

It has been brought to the attention of the Compressed Gas Association (CGA) by the U.S. Food and Drug Administration (FDA) that at least three fatalities have been caused by incidents where the CGA outlet connections on such containers have been switched to allow connection to the product distribution system. In each case the connection was changed on a filled liquid cylinder of another product that was properly labeled and ready for use. This is possible in situations where the CGA outlet connection is attached by a pipe-thread outlet and Teflon[®] tape rather than by being permanently connected to the valve by silver brazing, welding, or by using other tamper-resistant mechanisms.

It should be noted that there have also been several reported incidents at industrial gas customers that were also caused by the switching of CGA connections. Based on these incidents, the CGA recommends the following actions be taken by the user to ensure the safe use of portable cylinders containing cryogenic liquids:

- 1. Check the cylinder label** to ensure it contains the proper gas for the application. Do not use a cylinder that is not properly labeled.
- 2. Do not use adapters or change CGA connections** on the cylinder when trying to connect to a product distribution system.
- 3. Refer to CGA SB-10**, *Correct Labeling and Proper Fittings on Cylinders/Containers* for additional recommendations [1].

Suppliers should provide this Safety Alert to their customers that receive medical or industrial gas in portable cryogenic vessels or dewars. If connections are found to have been changed or tampered with after a container has been filled, CGA recommends that the supplier notify, in writing, the facility where the change occurred that changing connections is dangerous and can lead to fatalities.

Reference

[1] CGA SB-10, *Correct Labeling and Proper Fittings on Cylinders/Containers*, Compressed Gas Association, Inc., 4221 Walney Rd., 5th Floor, Chantilly, VA 20151.

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This document is subject to periodic review, and users are cautioned to obtain the latest edition. The Association invites comments and suggestions for consideration. In connection with such review, any such comments or suggestions will be fully reviewed by the Association after giving the party, upon request, a reasonable opportunity to be heard. Proposed changes may be submitted via the Internet at our web site, www.cganet.com.

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