



Standard Practice for Handling, Transportation, and Storage of Halon 1301, Bromotrifluoromethane (CF₃Br)¹

This standard is issued under the fixed designation D5631; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 This practice covers guidance and direction to suppliers, recyclers, reclaimers, purchasers, and users in the handling, transportation, and storage of Halon 1301.

1.2 The values stated in inch-pound units are to be regarded as standard. The values given in parentheses are mathematical conversions to SI units that are provided for information only and are not considered standard.

1.3 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and to determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 ASTM Standards:²

D5632/D5632M Specification for Halon 1301, Bromotrifluoromethane (CF₃Br)

2.2 CGA Standards:³

C-1 Methods for Pressure Testing Compressed Gas Cylinders

C-6 Standard for Visual Inspection of Steel Compressed Gas Cylinders

C-7 Guide to Classification and Labeling of Compressed Gases

P-1 Standard for Safe Handling of Compressed Gases in Containers

SB-1 Safety Bulletin: Hazards of Refilling or Reusing Compressed Refrigerant (Halogenated Hydrocarbon) Gas Cylinders

SB-5 Safety Bulletin: Hazards of Reusing Disposable Refrigerant (Halogenated Hydrocarbon) Gas Cylinders

SB-18 Safety Bulletin: Use of Refrigerant (Halogenated Hydrocarbon) Recovery Cylinders

2.3 U.S. Government Standards:⁴

CFR Title 40, Part 82.106, Environmental Protection Agency, Warning Statement Requirements

CFR Title 49, Part 172, U.S. DOT, Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, and Training Requirements

CFR Title 49, Part 173, U.S. DOT, Specifications, Shippers-General Requirements for Shipping and Packagings

CFR Title 49, Part 178, U.S. DOT, Specifications for Packagings

CFR Title 49, Part 180, U.S. DOT, Continuing Qualification and Maintenance of Packagings

2.4 Other Document:⁵

Safety Guide for Decommissioning Halon Systems, Volume 2 of the U.S. Environmental Protection Agency Outreach Report: Moving Towards a World Without Halon

3. Terminology

3.1 Definitions of Terms Specific to This Standard:

3.1.1 *containers*—storage vessel for Halon 1301.

3.1.2 *cylinders*—containers of Halon 1301.

3.1.3 *Halon 1301*—bromotrifluoromethane, a compound used to inert or suppress a fire or explosion hazard.

3.1.4 *insulated*—placed in an isolated situation to protect and prevent the transfer of damage.

4. Significance and Use

4.1 This practice provides requirements for the handling, transportation, and storage of Halon 1301 encountered in distribution through both commercial and military channels. It is intended to ensure that Halon 1301 is handled, transported, and stored in such a way that its physical property values are

¹ This practice is under the jurisdiction of ASTM Committee D26 on Halogenated Organic Solvents and Fire Extinguishing Agents and is the direct responsibility of Subcommittee D26.09 on Fire Extinguishing Agents.

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² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

³ Available from Compressed Gas Association, 14501 George Carter Way, Suite 103, Chantille, VA 20151, <http://www.cganet.com>.

⁴ Available from U.S. Government Publishing Office, 732 N. Capitol St., NW, Washington, DC 20401-0001, <http://www.gpo.gov>.

⁵ Available from Halon Recycling Corporation, 1001 19th St., N, Suite 1200, Arlington, VA 22209, <http://www.halon.org/safe.php>.