



Designation: D 5631 – 00

Standard Practice for Handling, Transportation, and Storage of Halon 1301, Bromotrifluoromethane (CF₃BR)¹

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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 for information only.

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:

D 5632 Specification for Halon 1301, Bromotrifluoromethane (CF₃Br)²

2.2 CGA Standards:

No. C-1 Methods for Hydrostatic Testing of Compressed Gas Cylinders³

No. C-4 American National Standard Method of Marking Portable Compressed Gas Containers to Identify the Material Contained³

No. C-6 Standards for Visual Inspection of Steel Compressed Gas Cylinders³

No. P-1 Safe Handling of Compressed Gases in Containers³

No. S-1.1 Pressure Relief Device Standards— Part 1 – Cylinders for Compressed Gases³

No. S-1.2 Pressure Relief Device Standards – Part 2 – Cargo and Portable Tanks for Compressed Gases³

No. S-1.3 Pressure Relief Device Standards – Part 3 – Stationary Storage Containers for Compressed Gases³

No. SB-1 Hazards of Refilling Compressed Refrigerant (Halogenated Hydrocarbon) Gas Cylinders³

No. SB-5 Hazards of Reusing Disposable Refrigerant (Halogenated Hydrocarbon) Gas Cylinders³

No. SB-18 Use of Refrigerant (Halogenated Hydrocarbon) Recovery Cylinders³

2.3 U.S. Government Standards:

Code of Federal Regulations (CFR) Title 40, Part 82.106⁴

Code of Federal Regulations (CFR) Title 49, Part 173, U.S. Department of Transportation (DOT) Specifications, Shippers-General Requirements for Shipping and Packagings⁴

Code of Federal Regulations (CFR) Title 49, Part 178, U.S. DOT Specifications for Packagings⁴

2.4 Other Documents:

Safety Guide for Decommissioning Halon Systems, Volume 2 of the U.S. Environmental Protection Agency Outreach Report, Moving Towards a World Without Halon⁵

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. Summary of Practice

4.1 Personnel shall be trained in accordance with Title 49 CFR, Part 172, Subpart H, to ensure safe handling, loading, unloading, storing, and transporting of material.

4.2 Handling:

4.2.1 Handling shall be in accordance with CGA Publication No P-1, Safe Handling of Compressed Gases in Containers and as specified by the manufacturer.

4.2.1.1 Personnel who handle or store, or both, cylinders of Halon 1301 shall be trained properly to recognize and identify the characteristics of the product and the proper methods of safely handling full, partly full, and empty cylinders.

4.2.2 All Halon transfers between storage containers and recycling processes shall be performed by personnel trained in handling procedures.

¹ This practice is under the jurisdiction of ASTM Committee D-26 on Halogenated Organic Solvents and Fire Extinguishing Agents and is the direct responsibility of Subcommittee D26.09 on Recycled Halon 1301.

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² *Annual Book of ASTM Standards*, Vol 15.05.

³ Available from the Compressed Gas Association.

⁴ Available from Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20036.

⁵ Available by means of the Internet: <http://128.174.5.51/denix/Public/News/DLA/Halon/hall.html>