



Designation: D8061 – 16

Standard Practice for Handling, Transportation, and Storage of 2-Bromo-3,3,3- Trifluoro-1-Propene (CF₃CBr=CH₂)¹

This standard is issued under the fixed designation D8061; 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 reappraisal. A superscript epsilon (ε) indicates an editorial change since the last revision or reappraisal.

1. Scope

1.1 This practice covers guidance and direction to suppliers, reclaimers, purchasers, and users in the handling, transportation, and storage of 2-Bromo-3,3,3-Trifluoro-1-Propene (“2-BTP”).

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 determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 *ASTM Standards:*²

D8060 Specification for 2-Bromo-3,3,3-Trifluoro-1-Propene (CF₃CBr=CH₂)

2.2 *U.S. Government Standards:*³

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

CFR Title 49, Part 172.101 U.S. DOT, Tables of Hazardous Materials and Special Provisions

3. Terminology

3.1 *Definitions of Terms Specific to This Standard:*

3.1.1 2-BTP, *n*—2-Bromo-3,3,3-Trifluoro-1-Propene (CF₃CBr=CH₂); a compound used to inert, extinguish, or suppress a fire or explosion hazard.

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

3.1.2 *containers, n*—storage vessels for 2-BTP.

3.1.3 *cylinders, n*—containers of 2-BTP.

3.1.4 *insulated, v*—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 2-BTP encountered in distribution through both commercial and military channels. It is intended to ensure that 2-BTP is handled, transported, and stored in such a way that its physical property virtues are not degraded. Transport may be by various means, such as, but not limited to, highway, rail, water, and air.

5. Practice

5.1 To ensure safe handling, loading, unloading, storing, and transporting of material, personnel shall be trained to follow guidance contained within the manufacturer's Safety Data Sheet for this substance.

5.2 *Handling:*

5.2.1 Handling shall be in accordance with the current manufacturer's Safety Data Sheet for this substance.

5.2.1.1 Personnel who handle or store, or both, containers of 2-BTP shall be trained properly to recognize and identify the characteristics of the product and the proper methods of safely handling full, partially full, and empty containers.

5.2.2 All 2-BTP transfers between storage containers and recycling processes shall be performed by personnel trained in handling procedures.

5.2.2.1 2-BTP recycling and transfer processes shall be in conjunction with the equipment specified by the manufacturer.

5.2.3 To preclude product accumulation and decomposition, 2-BTP handling shall be performed in ventilated areas that are nonsmoking and free of portable heaters with high-temperature elements. Provisions shall be made to ensure that 2-BTP concentrations do not exceed 10 000 ppm (1 %) by volume for 1 min in service areas.

5.2.4 Containers shall not be overfilled. The liquid portion of the 2-BTP must not completely fill the container's internal volume at any temperature up to and including 130°F (54°C). The maximum permitted filling density for 2-BTP shall be 87 lb/ft³ (1400 kg/m³).