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Standard Practice for Handling, Transportation, and Storage of IG-100 (Nitrogen)¹

This standard is issued under the fixed designation D7323; 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, purchasers, and users in the handling, transportation, and storage of IG-100 (nitrogen).

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 CGA Standards:²

C-1 Methods for HydrostaticPressure Testing of Compressed Gas Cylinders

C-4 American National Standard Method of Marking Portable Compressed Gas Containers to Identify the Material Contained C-6 Standards for Visual Inspection of Steel Compressed Gas Cylinders

C-7 Guide to Preparation of Precautionary Labeling and Marking of Compressed Gas Containers

P-1 Safe Handling of Compressed Gases in Containers

2.2 U.S. Government Standards, Code of Federal Regulations (CFR):³

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

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

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

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

CFR Title 49, Part 180 U.S. DOT, Continuing Qualification and Maintenance of Packagings 0072a6/astm-d7323-13

3. Terminology

3.1 Definitions of Terms Specific to This Standard:

- 3.1.1 containers—storage vessels for IG-100.
- 3.1.2 cylinders—containers of IG-100.

3.1.3 IG-100 (nitrogen)-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 IG-100 encountered in distribution through both commercial and military channels. It is intended to ensure that IG-100 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 and water.

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 Available from Compressed Gas Association, 4221 Walney Road, 5th Floor, Chantilly, VA 20151. www.eganet.com.Association.

³ Available from Superintendent of Documents, U.S. Government Printing Office, Superintendent of Documents, Washington, DC 20036.