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Work item 13-013

Atmospheric Gases and Equipment Committee

NOTE—Technical changes from the previous edition are underlined.
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1 **Scope**

This publication describes specification requirements for gaseous and liquid argon.

This publication does not attempt to recommend or establish end usage designations for specific types or grades of products. Users requiring this kind of information should contact individual gas suppliers.

2 **Definitions**

For the purpose of this publication, the following definitions apply.

2.1 **Publication terminology**

2.1.1 **Shall**
Indicates that the procedure is mandatory. It is used wherever the criterion for conformance to specific recommendations allows no deviation.

2.1.2 **Should**
Indicates that a procedure is recommended.

2.1.3 **May**
Indicates that the procedure is optional.

2.1.4 **Will**
Is used only to indicate the future, not a degree of requirement.

2.1.5 **Can**
Indicates a possibility or ability.

2.2 **Technical definitions**

2.2.1 **Container**
Portable compressed gas cylinders and liquid containers made in accordance with Title 49 of the U.S. Code of Federal Regulations (49 CFR) Parts 100-199; Transport Canada’s Transportation of Dangerous Goods Regulations; or the ASME Boiler and Pressure Vessel Code, Section VIII, Div 1 [1, 2, 3].

3 **Classification**

3.1 **Types**

Gaseous argon is denoted as Type I and liquid argon as Type II.

3.2 **Quality verification levels (grades)**

Table 1 presents the component maximums in parts per million (ppm [v/v]) unless otherwise stated for the quality verification levels (QVLs) of argon. A blank indicates no maximum limiting characteristic. The absence of a value in a listed QVL does not imply that the limiting characteristic is or is not present, but merely indicates that the test is not required for compliance with the specification. Typical uses are listed in Table 2.

3.3 **Quality tests**

By standard practice, the supplier ensures the QVL of argon. If otherwise required, alternative control procedures are described in 4.3.1, 4.3.2, and Sections 5 and 6. Other control procedures not listed in this specification are acceptable if agreed upon between the supplier and the customer.

**WARNING:** Argon can be an asphyxiant, can displace life-supporting oxygen, and is heavier than air. See CGA P-9, The Inert Gases: Argon, Nitrogen, and Helium [4].

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1 References are shown by bracketed numbers and are listed in order of appearance in the reference section.