



ADDENDA

**ANSI/ASHRAE Addendum j to
ANSI/ASHRAE Standard 34-2024**

Designation and Safety Classification of Refrigerants

Approved by ASHRAE and the American National Standards Institute on April 30, 2025.

This addendum was approved by a Standing Standard Project Committee (SSPC) for which the Standards Committee has established a documented program for regular publication of addenda or revisions, including procedures for timely, documented, consensus action on requests for change to any part of the standard. Instructions for how to submit a change can be found on the ASHRAE® website (www.ashrae.org/continuous-maintenance).

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Cognizant TC: 3.1, Refrigerants and Secondary Coolants

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FOREWORD

Addendum j clarifies the flammability test conditions and the minimum required resolution for the test conditions.

Informative Note: In this addendum, changes to the current standard are indicated in the text by underlining (for additions) and ~~striking through~~ (for deletions) unless the instructions specifically mention some other means of indicating the changes.

Addendum j to Standard 34-2024

Modify Normative Appendix B as follows. The remainder of Appendix B remains unchanged.

B1.9 Flammability Test Data Required. Applications shall include test results determined in accordance with Section B1. Test conditions shall be controlled to the tolerances cited below. Applications shall include tabulated flammability test data for each refrigerant or refrigerant blend composition tested. These data shall include but are not limited to the following:

- a. Refrigerant blend composition tested: ~~± 0.1~~ ± 0.5 mass percent ~~or one-fourth of the composition tolerance range, whichever is smaller~~
- b. Flammability test temperature: $\pm 5^{\circ}\text{F}$ ($\pm 3^{\circ}\text{C}$)
- c. Fractionation or leak test temperature: ~~$\pm 0.2^{\circ}\text{F}$ (0.1°C)~~ $\pm 2^{\circ}\text{F}$ ($\pm 1^{\circ}\text{C}$)
- d. Test pressure: ~~± 0.1 psi (0.7 kPa)~~ between 14.1 psia (97.3 kPa) and 15.1 psia (104.0 kPa)
- e. Humidity: 0.0088 \pm 0.0005 g of water vapor per gram of dry air
- f. Refrigerant/air concentration: $\pm 0.2\%$ by volume
- g. Spark duration: ± 0.05 seconds
- h. ~~Flame propagation determination as measured from the point of ignition to the walls of the flask: ± 5.0 degrees~~

The minimum measurement resolution required for various test conditions are as follows:

- a. Refrigerant blend composition tested: 0.1 mass percent
- b. Flammability test temperature: 0.2°F (0.1°C)
- c. Fractionation or leak test temperature: 0.2°F (0.1°C)
- d. Test pressure: 0.1 psi (0.7 kPa)
- e. Humidity: 0.0001 g of water vapor per gram of dry air
- f. Refrigerant/air concentration: 0.1% by volume
- g. Spark duration: 0.01 seconds
- h. Flame propagation determination as measured from the point of ignition to the walls of the flask: 1.0 degrees

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ASHRAE is concerned with the impact of its members' activities on both the indoor and outdoor environment. ASHRAE's members will strive to minimize any possible deleterious effect on the indoor and outdoor environment of the systems and components in their responsibility while maximizing the beneficial effects these systems provide, consistent with accepted Standards and the practical state of the art.

ASHRAE's short-range goal is to ensure that the systems and components within its scope do not impact the indoor and outdoor environment to a greater extent than specified by the Standards and Guidelines as established by itself and other responsible bodies.

As an ongoing goal, ASHRAE will, through its Standards Committee and extensive Technical Committee structure, continue to generate up-to-date Standards and Guidelines where appropriate and adopt, recommend, and promote those new and revised Standards developed by other responsible organizations.

Through its *Handbook*, appropriate chapters will contain up-to-date Standards and design considerations as the material is systematically revised.

ASHRAE will take the lead with respect to dissemination of environmental information of its primary interest and will seek out and disseminate information from other responsible organizations that is pertinent, as guides to updating Standards and Guidelines.

The effects of the design and selection of equipment and systems will be considered within the scope of the system's intended use and expected misuse. The disposal of hazardous materials, if any, will also be considered.

ASHRAE's primary concern for environmental impact will be at the site where equipment within ASHRAE's scope operates. However, energy source selection and the possible environmental impact due to the energy source and energy transportation will be considered where possible. Recommendations concerning energy source selection should be made by its members.

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