



ADDENDA

**ANSI/ASHRAE Addendum u to
ANSI/ASHRAE Standard 34-2022**

Designation and Safety Classification of Refrigerants

Approved by the ASHRAE Standards Committee on March 27, 2024 and by the American National Standards Institute on April 22, 2024.

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ISSN 1041-2336



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Cognizant TC: 3.1, Refrigerants and Secondary Coolants

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FOREWORD

Addendum u delineates the designation numbering of zeotropic refrigerant blends following the assignment of R-499A.

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 u to Standard 34-2022

Modify Section 4 as shown. The remainder of Section 4 remains unchanged.

4. NUMBERING OF REFRIGERANTS

[. . .]

4.1.1 Designation. Zeotropic blends shall be assigned an identifying number in the 400 or 4000 series. Azeotropes shall be assigned an identifying number in the 500 series. To differentiate among blends having the same components with different proportions (% m/m), an uppercase letter shall be added as a suffix. An example of a zeotrope would be R-401A or R-4101A, and example of an azeotrope would be R-508A.

Informative Note: Refrigerant numbers and suffixes are preferably assigned in serial order. Refrigerant numbers and suffixes can be skipped to avoid confusion with other refrigerant designating standards. Refrigerants in the R-4000 series start with R-4101A to avoid confusion with other common 400 series refrigerants.

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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.

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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.

ASHRAE · 180 Technology Parkway · Peachtree Corners, GA 30092 · www.ashrae.org

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