ADDENDA

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

# Designation and Safety Classification of Refrigerants

Approved by ASHRAE and the American National Standards Institute on August 30, 2024.

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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ASHRAE obtains consensus through participation of its national and international members, associated societies, and public review.

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The Senior Manager of Standards of ASHRAE should be contacted for

a. interpretation of the contents of this Standard,
b. participation in the next review of the Standard,
c. offering constructive criticism for improving the Standard, or
d. permission to reprint portions of the Standard.

**(This foreword is not part of this standard. It is merely informative and does not contain requirements necessary for conformance to the standard. It has not been processed according to the ANSI requirements for a standard and may contain material that has not been subject to public review or a consensus process. Unresolved objectors on informative material are not offered the right to appeal at ASHRAE or ANSI.)**

## FOREWORD

*Addendum ab clarifies instructions for assigning designation prefixes.*

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

## Addendum ab to Standard 34-2022

***Modify Section 5 as follows. The remainder of Section 5 remains unchanged.***

## 5. DESIGNATION

[ . . . ]

**5.2.2 Composition Designation Prefixes.** The identifying number, as determined by Section 4, shall be ~~prefixed by the letter "C" for carbon and preceded by "B," "C," "F," or "I" – or a combination thereof in this sequence – to signify the presence of bromine, chlorine, fluorine, or iodine, respectively. Compounds that also contain hydrogen shall be further preceded by the letter "H" to signify the increased deterioration potential before reaching the stratosphere[14]. The compositional designating prefixes for ether shall substitute an "E" for "C," such that "HFE," "HCFE," and "CFE" refer to hydrofluoroethers, hydrochlorofluoroethers, and chlorofluoroethers, respectively. The composition designating prefixes for halogenated olefins shall be either "CFC," "HCFC," or "HFC" to refer to chlorofluorocarbon, hydrochlorofluorocarbon, or hydrofluorocarbon, respectively, or with substitution of an "O" for the carbon "C" as "CFO," "HCFO," or "HFO" to refer to chlorofluoro-olefin, hydrochlorofluoro-olefin, or hydrofluoro-olefin, respectively.~~ preceded by a composition-designating prefix.

The composition-designating prefixes for compounds shall be assigned in following order:

a. If compound has hydrogen, designation shall start with "H".
b. If compound has bromine, "B" shall be appended to the designation obtained in step (a).
c. If compound has chlorine, "C" shall be appended to the designation obtained in step (b).
d. If compound has fluorine, "F" shall be appended to the designation obtained in step (c).
e. If compound has iodine, "I" shall be appended to the designation obtained in step (d).
f. The designation shall always end with "C" to refer to the carbon.

***Exceptions to 5.2.2(f):***

1. For ethers, the "C" shall be substituted by an "E".
2. For halogen-containing olefins, the "C" shall be substituted by an "O".

~~Halogenated~~ Halogen-containing olefins are a subset of ~~halogenated~~ halogen-containing organic (or carbon-containing) compounds having significantly shorter atmospheric lifetimes than their saturated counterparts. ~~Examples include CFC-11, CFC-12, BCFC-12B1, BFC-13B1, HCFC-22, HC-50, CFC-113, CFC-114, CFC-115, HCFC-123, HCFC-124, HFC-125, HFC-134a, HCFC-141b, HCFC-142b, HFC-143a, HFC-152a, HC-170, FC-C318, and HFC-1234yf or HFO-1234yf.~~

Examples of items (a) through (f) are as follows: BCFC-12B1, BFC-13B1, CFC-11, FC-C318, FIC-13I1, HC-50, HCFC-22, HE-E170, HFC-125, and HFO-1234yf.

[ . . . ]

# POLICY STATEMENT DEFINING ASHRAE'S CONCERN FOR THE ENVIRONMENTAL IMPACT OF ITS ACTIVITIES

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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As an industry leader in research, standards writing, publishing, certification, and continuing education, ASHRAE and its members are dedicated to promoting a healthy and sustainable built environment for all, through strategic partnerships with organizations in the HVAC&R community and across related industries.

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