



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

Public Review Draft

Proposed Addendum ab to Standard 34-2022, Designation and Safety Classification of Refrigerants

**Second Public Review (June 2024)
(Draft shows Proposed Changes to Current Standard)**

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FOREWORD

This proposed addendum adds HCC and HCO for unsaturated hydrochloro-olefins.

Note: This addendum makes proposed changes to the current standard. These changes are indicated in the text by underlining (for additions) and ~~strike through~~ (for deletions) except where the reviewer instructions specifically describe some other means of showing the changes. Only these changes to the current standard are open for review and comment at this time. Additional material is provided for context only and is not open for comment except as it relates to the proposed 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 stratosphere¹⁴. ~~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:

1. If compound has hydrogen, designation shall start with "H".
 2. If compound has bromine, "B" shall be appended to the designation obtained in previous step.
 3. If compound has chlorine, "C" shall be appended to the designation obtained in previous step.
 4. If compound has fluorine, "F" shall be appended to the designation obtained in previous step.
 5. If compound has iodine, "I" shall be appended to the designation obtained in previous step.
6. The designation shall always end with "C" to refer to the carbon, except for ethers, the "C" shall be substituted by an "E" and 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 1. through 6. are as follows: BCFC-12B1, BFC-13B1, CFC-11, FC-C318, FIC-131, HC-50, HCFC-22, HE-E170, HFC-125, and HFO-1234yf.

[...]