



ADDENDA

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

Designation and Safety Classification of Refrigerants

Approved by ASHRAE and the American National Standards Institute on September 29, 2023.

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 s adds the zeotropic refrigerant blend R-488A to Tables 4-2 and D-2.

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

Addendum s to Standard 34-2022

Modify Tables 4-2 and D-2 as shown.

Table 4-2 Data and Safety Classifications for Refrigerant Blends

Refrigerant Number = 488A

Composition (Mass %) = R-32/1234yf/152a/1234ze(E) (6.0/50.0/3.0/41.0)

Composition tolerances = $\pm 1.0/\pm 2.0/\pm 1.0, -0.5/\pm 2.0$

OEL = 650 ppm v/v

Safety Group = A2L

RCL = 16,000 ppm v/v; 4.3 lb/1000 ft³; 68 g/m³

LFL = 63,000 ppm v/v; 17.1 lb/1000 ft³; 270 g/m³

BV = ≤ 4.0 cm/s

Highly Toxic or Toxic Under Code Classification = Neither

Table D-2 Data Classifications for Refrigerant Blends

Refrigerant Number = 488A

Composition (Mass %) = R-32/1234yf/152a/1234ze(E) (6.0/50.0/3.0/41.0)

Average Relative Molar Mass = 104.3 g/mol

Bubble Point (°F) = -31.1

Dew Point (°F) = -18.4

Bubble Point (°C) = -35.1

Dew Point (°C) = -28.0

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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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