

BSR/ASHRAE Addendum a to ANSI/ASHRAE Standard 34-2024

Public Review Draft

Proposed Addendum a to Standard 34-2024, Designation and Safety Classification of Refrigerants

First Public Review (February 2025)
(Draft shows Proposed Changes to Current Standard)

This draft has been recommended for public review by the responsible project committee. To submit a comment on this proposed standard, go to the ASHRAE website at https://www.ashrae.org/technical-resources/standards-and-guidelines/public-review-drafts and access the online comment database. The draft is subject to modification until it is approved for publication by the Board of Directors and ANSI. Until this time, the current edition of the standard (as modified by any published addenda on the ASHRAE website) remains in effect. The current edition of any standard may be purchased from the ASHRAE Online Store at www.ashrae.org/bookstore or by calling 404-636-8400 or 1-800-727-4723 (for orders in the U.S. or Canada).

This standard is under continuous maintenance. To propose a change to the current standard, follow the instructions on the ASHRAE website at https://www.ashrae.org/technical-resources/standards-and-guidelines/standards-and-guidelines-under-continuous-maintenance.

The appearance of any technical data or editorial material in this public review document does not constitute endorsement, warranty, or guaranty by ASHRAE of any product, service, process, procedure, or design, and ASHRAE expressly disclaims such.

© 2023 ASHRAE. This draft is covered under ASHRAE copyright. Permission to reproduce or redistribute all or any part of this document must be obtained from the ASHRAE Manager of Standards, 180 Technology Parkway NW, Peachtree Corners, GA 30092. Phone: 404-636-8400, Ext. 1125. Fax: 404-321-5478. E-mail: standards.section@ashrae.org.

180 Technology Parkway NW, Peachtree Corners, GA 30092

BSR/ASHRAE Addendum a to ANSI/ASHRAE Standard 34-2024, Designation and Safety Classification of Refrigerants First Public Review Draft

(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

This proposed addendum adds the zeotropic refrigerant blend R-494B to Tables 4-2 and D-2.

Note: This addendum makes proposed changes to the current standard. These changes are indicated in the text by <u>underlining</u> (for additions) and <u>strikethrough</u> (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 a to Standard 34-2024

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

Table 4-2 Data and Safety Classifications for Refrigerant Blends

Refrigerant Number = $\underline{494B}$

Composition (Mass %) = R-744/152a/13I1 (4.0/38.0/58.0)

Composition tolerances = $(\pm 1.5, \pm 0.5/\pm 1.0/\pm 1.0)$

 $OEL = 810 \text{ ppm_v/v}$

Safety Group = $\underline{A2L}$

 $RCL = 5,900 \text{ ppm} / 1.6 \text{ lb} / 1000 \text{ ft}^3 / 25 \text{ g/m}^3$

LFL = 85,000 ppm $\frac{22}{2}$ lb/1000 ft³/ $\frac{347}{2}$ g/m³

BV = 8.9 cm/sec

Highly Toxic or Toxic Under Code Classification = Neither

Table D-2 Data Classifications for Refrigerant Blends

Refrigerant Number = 494B

Composition (Mass %) = R - 744/152a/13I1 (4.0/38.0/58.0)

Average Relative Molar Mass = $\underline{103.9}$ g/mol

Bubble Point (°F) = -54.9 °F

Dew Point (°F) = $\underline{-20.6}$ °F

Bubble Point (°C) = -48.3°C

Dew Point (°C) = $\underline{-29.2}$ °C