



**BSR/ASHRAE Addendum h
to ANSI/ASHRAE Standard 34-2024**

Public Review Draft

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

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

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FOREWORD

This proposed addendum adds the zeotropic refrigerant blend R-4102A 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 underlining (for additions) and ~~striketrough~~ (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 h 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 = 4102A

Composition (Mass %) = R-134a/1234ze(E)/1233zd(E) (10.0/60.0/30.0)

Composition tolerances = (+1.5, -0.5/+0.3, -2.0/+1.5, -0.5)

OEL = 820 ppm_{v/v}

Safety Group = A1

RCL = 47,000 ppm / 14 lb/1000 ft³ / 220 g/m³

Highly Toxic or Toxic Under Code Classification = Neither

Table D-2 Data Classifications for Refrigerant Blends

Refrigerant Number = 4102A

Composition (Mass %) = R-134a/1234ze(E)/1233zd(E) (10.0/60.0/30.0)

Average Relative Molar Mass = 117.1 g/mol

Bubble Point (°F) = 3.8 °F

Dew Point (°F) = 24.4 °F

Bubble Point (°C) = -15.7 °C

Dew Point (°C) = -4.2 °C