



ADDENDA

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

Designation and Safety Classification of Refrigerants

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

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Cognizant TC: 3.1, Refrigerants and Secondary Coolants

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FOREWORD

Addendum w adds the zeotropic refrigerant blend R-454D 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 w 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 = 454D

Composition (Mass %) = R-32/1234yf (43.0/57.0)

Composition tolerances = ±2.0/±2.0

OEL = 730 ppm v/v

Safety Group = A2L

RCL = 22,000 ppm v/v; 4.4 lb/1000 ft³; 69 g/m³

LFL = 87,500 ppm v/v; 17.4 lb/1000 ft³; 275 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 = 454D

Composition (Mass %) = R-32/1234yf (43.0/57.0)

Average Relative Molar Mass = 75.4 g/mol

Bubble Point (°F) = -55.8

Dew Point (°F) = -48.1

Bubble Point (°C) = -48.8

Dew Point (°C) = -44.5

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