



ASHRAE STANDARD

Designation and Safety Classification of Refrigerants

Approved by the ASHRAE Standards Committee on January 27, 2007; by the ASHRAE Board of Directors on March 2, 2007; and by the American National Standards Institute on March 3, 2007.

This standard is under continuous maintenance 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. The change submittal form, instructions, and deadlines may be obtained in electronic form from the ASHRAE Web site, <http://www.ashrae.org>, or in paper form from the Manager of Standards. The latest edition of an ASHRAE Standard may be purchased from ASHRAE Customer Service, 1791 Tullie Circle, NE, Atlanta, GA 30329-2305. E-mail: orders@ashrae.org. Fax: 404-321-5478. Telephone: 404-636-8400 (worldwide), or toll free 1-800-527-4723 (for orders in US and Canada).

© Copyright 2007 ASHRAE, Inc.

ISSN 1041-2336

When addenda, interpretations, or errata to this standard have been approved, they can be downloaded free of charge from the ASHRAE Web site at <http://www.ashrae.org>.



www.ansi.org

**American Society of Heating, Refrigerating
and Air-Conditioning Engineers, Inc.**

1791 Tullie Circle NE, Atlanta, GA 30329

www.ashrae.org

ASHRAE Standing Standard Project Committee 34
Cognizant TC: TC 3.1, Refrigerants and Secondary Coolants
SPLS Liaison: Roger L. Hedrick
Staff Liaison: Douglas K. Tucker

Robert G. Doerr, <i>Chair*</i>	Debra H. Kennoy*	Vikas Patnaik
James M. Calm, <i>Vice Chair*</i>	Jay A. Kohler	Robert G. Richard
Sean Cunningham	Andrew Kusmierz*	George M. Rusch
David A. Didion*	Thomas J. Leck	James R. Sand*
Paul H. Dugard*	Mark O. McLinden*	Ganesan 'Sonny' Sundaresan
Andrew M. Gbur*	Nandini C. Mouli	Eugene F. Troy
H. Michael Hughes*	Sandra R. Murphy	David Wilson*
Gary W. Jepson*	Sunil Nanjundaram	

* Denotes members of voting status when the document was approved for publication.

ASHRAE STANDARDS COMMITTEE 2005–2006

Richard D. Hermans, <i>Chair</i>	Jay A. Kohler
David E. Knebel, <i>Vice-Chair</i>	James D. Lutz
Donald L. Brandt	Merle F. McBride
Steven T. Bushby	Mark P. Modera
Paul W. Cabot	Cyrus H. Nasser
Hugh F. Crowther	Stephen V. Santoro
Samuel D. Cummings, Jr.	Stephen V. Skalko
Robert G. Doerr	David R. Tree
Hakim Elmahdy	Jerry W. White, Jr.
Roger L. Hedrick	James E. Woods
John F. Hogan	William E. Murphy, <i>BOD ExO</i>
Frank E. Jakob	Ronald E. Jarnagin, <i>CO</i>
Stephen D. Kennedy	

Claire B. Ramspeck, *Assistant Director of Technology for Standards and Special Projects*

SPECIAL NOTE

This American National Standard (ANS) is a national voluntary consensus standard developed under the auspices of the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE). Consensus is defined by the American National Standards Institute (ANSI), of which ASHRAE is a member and which has approved this standard as an ANS, as "substantial agreement reached by directly and materially affected interest categories. This signifies the concurrence of more than a simple majority, but not necessarily unanimity. Consensus requires that all views and objections be considered, and that an effort be made toward their resolution." Compliance with this standard is voluntary until and unless a legal jurisdiction makes compliance mandatory through legislation.

ASHRAE obtains consensus through participation of its national and international members, associated societies, and public review.

ASHRAE Standards are prepared by a Project Committee appointed specifically for the purpose of writing the Standard. The Project Committee Chair and Vice-Chair must be members of ASHRAE; while other committee members may or may not be ASHRAE members, all must be technically qualified in the subject area of the Standard. Every effort is made to balance the concerned interests on all Project Committees.

The Manager of Standards of ASHRAE should be contacted for:

- a. interpretation of the contents of this Standard,
- b. participation in the next review of the Standard,
- c. offering constructive criticism for improving the Standard,
- d. permission to reprint portions of the Standard.

DISCLAIMER

ASHRAE uses its best efforts to promulgate Standards and Guidelines for the benefit of the public in light of available information and accepted industry practices. However, ASHRAE does not guarantee, certify, or assure the safety or performance of any products, components, or systems tested, installed, or operated in accordance with ASHRAE's Standards or Guidelines or that any tests conducted under its Standards or Guidelines will be nonhazardous or free from risk.

ASHRAE INDUSTRIAL ADVERTISING POLICY ON STANDARDS

ASHRAE Standards and Guidelines are established to assist industry and the public by offering a uniform method of testing for rating purposes, by suggesting safe practices in designing and installing equipment, by providing proper definitions of this equipment, and by providing other information that may serve to guide the industry. The creation of ASHRAE Standards and Guidelines is determined by the need for them, and conformance to them is completely voluntary.

In referring to this Standard or Guideline and in marking of equipment and in advertising, no claim shall be made, either stated or implied, that the product has been approved by ASHRAE.

(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 addendum adds a designation of R-426A to the blend R-125/134a/600a/601a (5.1/93.0/1.3/0.6) with tolerances of ($\pm 1.0/\pm 1.0/+0.1,-0.2/+0.1,-0.2$) and a safety classification of A1.

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 *i* to ANSI/ASHRAE Standard 34-2004

Add to Table 2 the following entries for R-426A:

TABLE 2 Data and Safety Classifications for Refrigerant Blends

Refrigerant Number	Composition (Mass %)	Composition Tolerances	Safety Group
<u>426A</u>	<u>R-125/134a/600a/601a (5.1/93.0/1.3/0.6)</u>	<u>($\pm 1.0/\pm 1.0/+0.1,-0.2/+0.1,-0.2$)</u>	<u>A1</u>

**POLICY STATEMENT DEFINING ASHRAE'S CONCERN
FOR THE ENVIRONMENTAL IMPACT OF ITS ACTIVITIES**

ASHRAE is concerned with the impact of its members' activities on both the indoor and outdoor environment. ASHRAE's members will strive to minimize any possible deleterious effect on the indoor and outdoor environment of the systems and components in their responsibility while maximizing the beneficial effects these systems provide, consistent with accepted standards and the practical state of the art.

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.

ASHRAE will take the lead with respect to dissemination of environmental information of its primary interest and will seek out and disseminate information from other responsible organizations that is pertinent, as guides to updating standards and guidelines.

The effects of the design and selection of equipment and systems will be considered within the scope of the system's intended use and expected misuse. The disposal of hazardous materials, if any, will also be considered.

ASHRAE's primary concern for environmental impact will be at the site where equipment within ASHRAE's scope operates. However, energy source selection and the possible environmental impact due to the energy source and energy transportation will be considered where possible. Recommendations concerning energy source selection should be made by its members.