

ANSI/ASHRAE Addendum *j* to
ANSI/ASHRAE Standard 34-2001



ASHRAE[®] STANDARD

Designation and Safety Classification of Refrigerants

Approved by the ASHRAE Standards Committee on June 26, 2004;
by the ASHRAE Board of Directors on July 1, 2004; and by the
American National Standards Institute on July 1, 2004.

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 and printed copies of a public review draft 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 U.S. and Canada).

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**AMERICAN SOCIETY OF HEATING,
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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.

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- 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.

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(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.)

FOREWORD

The purpose of this addendum is to cite current ASTM test methods for flammability testing of refrigerants. ASTM E681 has undergone significant changes to improve the repeatability of results. The replacement of the kitchen match head as the ignition source with the ASTM spark ignition electrode along with other revised ASTM E681 test methods has long been accepted by SSPC 34 as significant improvements for increasing repeatability of test results. The change was originally proposed in public reviews of Addendum p to ASHRAE/ANSI 34-1992. However, opposition to other, more controversial changes proposed in 34p-92 has delayed its adoption.

Additions are shown in this addendum by underlining; deletions are shown by strikethrough.

ADDENDUM j TO ANSI/ASHRAE STANDARD 34-2001

Revise text in Subsection 6.1.3 and update reference to ASTM E681 in Section 9, References, as indicated:

6.1.3 Flammability Classification Refrigerants shall be assigned to one of three classes—1, 2, or 3—based on flammability. Tests shall be ~~made~~conducted in accordance with ASTM E681³ ~~85 except that the ignition source shall be an electrically activated kitchen match head for halocarbon refrigerants using a spark ignition source. Testing of all halocarbon refrigerants shall be in accordance with the Annex of~~ ASTM E681.

³~~*Concentration Limits of Flammability of Chemicals, ANSI/ASTM E681-85, American Society of Testing and Materials, Philadelphia, PA, 1984.*~~

³*ASTM E681-2001, Standard Test Method for Concentration Limits of Flammability of Chemicals (Vapors and Gases), American Society of Testing and Materials, West Conshohocken, PA, 2001.*

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.