



Portable Household Humidifiers

AHAM HU-1-2016



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PREFACE

The Association of Home Appliance Manufacturers develops standards in accordance with AHAM's "Policy and Procedures Governing Technical Standards" which states:

"AHAM standards shall be in the best interest, mutually, of consumers who use appliances, the industries which provide and service appliances, and other interested parties. They shall relate to actual use conditions, be technically and scientifically sound."

Use or observance of AHAM standards is voluntary.

This standard contains:

Test procedures that may be applied to any brand or model of portable humidifier. Results of tests in accordance with this standard may be publicly stated.

Methods for determining residential humidification requirements. Determination made in accordance with these methods can be used as a guide when estimating the appliance humidifier water output capacity recommended for specific residential applications.

An appendix that sets forth recommended humidifier operating guidelines and practices.

With regard to safety, AHAM recommends that all appliance products -- both major and portable -- manufactured or marketed in the United States be submitted to an appropriate independent nationally recognized testing laboratory for inspection and listing in conformance with the appropriate national safety standard. The relevant standard for humidifiers is Underwriters Laboratories 998, "Standard for Humidifiers."

AHAM welcomes comments and suggestions regarding this standard. Any standard may be reviewed and improved as needed. All standards must be updated or reconfirmed at least every five years. Any interested party, at any time, may request a change in an AHAM standard. Such request should be addressed to AHAM's President, and should be accompanied by a statement of reason for the request and a suggested alternate proposal.

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1. PURPOSE

This standard establishes a uniform, repeatable procedure and standard methods for measuring specified product characteristics of portable household humidifiers.

The standard methods provide a means to compare and evaluate different brands, models, and types of portable household humidifiers regarding characteristics significant to product use.

The standard methods are not intended to preclude the exercise of ingenuity in testing nor to inhibit improvement and innovation in product testing, design or performance.

2. SCOPE

This standard applies to portable household humidifiers as defined in Section 3.

This standard provides definitions, methods for testing and rating, and safety recommendations for portable household humidifiers.

This standard does not apply to humidifying apparatus (central system humidifiers) which must be permanently connected to systems for heating, cooling, distributing, or otherwise treating circulated air within a building enclosure.

3. DEFINITIONS

3.1 Portable Humidifier.

An electric cord-connected appliance in an encased assembly with the function of adding moisture to the air in the living space of a residence and which can be moved from room to room.

3.2 Types of Humidifier.

3.2.1 Evaporative Humidifier. A humidifier that transmits moisture into the air in an invisible or imperceptible form of water vapor by means of fan-forced air traveling through a moistened medium or filter.

3.2.2 Non-Evaporative Humidifier. A humidifier that transmits moisture to the air in a visible (perceptible) form. Non-evaporative humidifier technologies include:

3.2.2.1 Ultrasonic Humidifier. A humidifier which turns water to vapor by means of ultrasonic vibrations.

3.2.2.2 Cool Mist Impeller Humidifier. A humidifier that transmits moisture into the air in a visible cool mist by transforming water into a fine mist by means of centrifugal force.

3.2.2.3 Steam Vaporizer. A humidifier that transmits moisture into the air by means of a steam vapor created by boiling water within a water container by means of an electrical heating element or electrodes.

3.2.2.4 Warm Mist Humidifier. A humidifier that transmits moisture into the air in a warm mist by means of an electrical heating element in a small and well-defined heating chamber or tray.