NSF International Standard /
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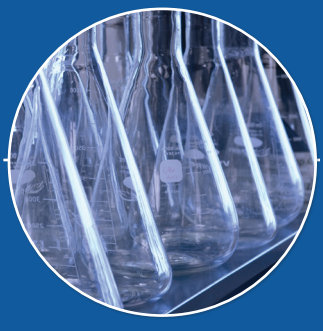
NSF/ANSI 62 - 2016

Drinking Water Distillation Systems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NSF International Standard/
American National Standard
for Drinking Water Treatment Units –

Drinking water distillation systems

Standard Developer

NSF International

NSF International Board of Directors

Designated as an ANSI Standard
April 05, 2016
American National Standards Institute

Prepared by
The NSF Joint Committee on Drinking Water Treatment Units

Recommended for Adoption by
The NSF Council of Public Health Consultants

Adopted by
The NSF Board of Directors
May 1989

Revised November 1992
Revised September 1997
Revised September 1999
Addendum, June 2002
Revised February 2004
Revised October 2007
Revised August 2009
Revised February 2012
Revised December 2013
Revised January 2015
Revised October 2015
Revised November 2016

Published by

NSF International
P. O. Box 130140, Ann Arbor, Michigan 48113-0140, USA

For ordering copies or for making inquiries with regard to this Standard, please refer to the designation "NSF/ANSI 62 – 2016."

Printed in the United States of America.

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Contents

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Foreword[2]

The purpose of this Standard is to establish minimum requirements for the materials, design and construction, and performance of point-of-use and point-of-entry drinking water distillation systems that are designed to reduce specific chemical and microbiological contaminants in public or private water supplies. NSF/ANSI 62 also specifies minimum product literature requirements that manufacturers must provide to authorized representatives and consumers.

Water contact materials in drinking water treatment units listed under NSF/ANSI 42, 44, 53, 55, 58, and 62 are tested and evaluated under a separate protocol from NSF/ANSI 61, with criteria that were developed specifically for the intended end-use. NSF/ANSI 61 listing should not be additionally required for acceptance of these listed units for water contact application.

This edition of the Standard contains the following revisions:

Issue 28

The total maximum effluent requirement for chromium (hexavalent and trivalent) under Table 7.1 (previously Table 8) was revised to be consistent with the requirements of the other Drinking Water Treatment Unit standards.

Issue 30

CAS numbers were added to Table 4.1 (previously Table 1) of the materials evaluation criteria.

Issue 31

This revision added language to state that systems be conditioned using the test water with the specified contaminant for chemical reduction claims under section 7.

The tables in this edition have also been changed to reflect the appropriate section in which it is located:

Previous edition of NSF/ANSI 62	Current edition of NSF/ANSI 62
Table 1	Table 4.1
Table 2	Table 4.2
Table 3	Table 4.3
Table 4	Table 4.4
Table 5	Table 5.1
Table 6	Table 6.1
Table 7	Table 6.2
Table 8	Table 7.1
Table 9	Table 7.2
Table 10	Table 8.1
Table 11	Table 8.2
Table 12	Table 8.3

Suggestions for improvement of this Standard are welcome. This Standard is maintained on a Continuous Maintenance schedule and can be opened for comment at any time. Comments should be sent to Chair, Joint Committee on Drinking Water Treatment Units at standards@nsf.org, c/o NSF International, Standards Department, P.O. Box 130140, Ann Arbor, Michigan 48113-0140, USA.

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NSF/ANSI Standard
for Drinking Water Treatment Units –

Drinking water distillation systems

1 General

1.1 Scope

This standard establishes minimum materials, design and construction, and performance requirements for point-of-use and point-of-entry drinking water distillation systems and the components used in these systems. Distillation systems covered by this standard are designed to reduce specific chemical contaminants from potable drinking water supplies. Systems covered under this standard may also be designed to reduce microbiological contaminants, including bacteria, viruses, and cysts, from potable drinking water supplies. It is recognized that a system may be effective in controlling one or more of these contaminants, but systems are not required to control all.

Systems covered by this standard are not intended for the treatment of water that is visually contaminated (turbid) or has an obvious contamination source, such as raw sewage, nor are systems covered by this standard intended to convert wastewater to microbiologically potable water.

1.2 Minimum requirements

A system as defined in this standard shall meet the applicable requirements of Sections 4, 5, 6, and 8.

A component as defined in this standard shall meet the requirements of 4 and 8. If the component is pressure bearing, it shall also meet the applicable requirements of 5.

1.3 Chemical and microbiological reduction performance claims

1.3.1 All NSF/ANSI 62 performance claims shall be verified and substantiated by test data generated under the requirements of NSF/ANSI 62.

1.3.2 When performance claims are made for substances not specifically addressed in the scope of this Standard or for those substances not specifically addressed but falling under the scope of NSF/ANSI 62, those claims not specifically addressed in the Standard shall be so identified.

1.4 Treatment train

A system that contains multiple, sequential treatment technologies for a performance claim under this Standard shall meet the applicable requirements as described in Annex D.

1.5 Reviews and revisions

This Standard shall be reviewed at least every five years. The review is to be conducted by the NSF Joint Committee on Drinking Water Treatment Units.

2 Normative references

The following documents contain requirements which, by reference in this text, constitute requirements of this standard. At the time of publication, the indicated editions were valid. All standards are subject to revision and parties are encouraged to investigate the possibility of applying the recent editions of the standards indicated below. The most recent published edition of the document shall be used for undated references.

NSF/ANSI 61 – *Drinking water system components – Health effects*

APHA, Standard Methods for the Examination of Water and Wastewater, twentieth edition, 1998[3]

USEPA–600/4-79-020, Methods for the Chemical Analysis of Water and Wastes, March 1983[4]

USEPA-600-4-84-053, Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater, June 1984[4]

USEPA–600/4-88/039, Methods for the Determination of Organic Compounds in Drinking Water, December 1988[4]

USEPA-600/4-90/020, Methods for the Determination of Organic Compounds in Drinking Water - Supplement 1, July 1990[4]

USEPA–600/4-91/010, Methods for the Determination of Metals in Environmental Samples, June 1991[4]

USEPA *National Primary Drinking Water Regulations*, 40 CFR Part 141[5]US EPA *National Secondary Drinking Water Regulations*, 40 CFR Part 143[5]

USEPA *National Secondary Drinking Water Regulations*, 56 CFR Part 3573[5]

US FDA Code of Federal Regulations, Title 21, (*Food and Drugs) Direct Food Additive Substances Parts 170 through 199*, April 1, 1992[6]

3 Definitions

Terms used in this Standard that have a specific technical meaning are defined in NSF/ANSI 330.

4 Materials

4.1 Materials in contact with drinking water

4.1.1 POE drinking water treatment units shall conform to the protocol and criteria in NSF/ANSI 61.

4.1.2 POU drinking water treatment units shall conform to the protocol and criteria in this section.

[3] American Public Health Association (APHA), 1015 Fifteenth Street, NW, Washington, DC 20005 <www.apha.org>.

[4] US Environmental Protection Agency (USEPA), Environmental Monitoring and Support Laboratory, Cincinnati, OH 45268 <www.epa.gov>.

[5] Superintendent of Documents, US Government Printing Office, Washington, DC 20402 <www.gpo.gov>.

[6] US Food and Drug Administration (US FDA), 5600 Fishers Lane, Rockville, MD 20857 <www.fda.gov>.