



*NSF International Standard /  
American National Standard*

**NSF/ANSI 62 - 2015**

**Drinking Water Distillation Systems**



*NSF International, an independent, not-for-profit, non-governmental organization, is dedicated to being the leading global supplier of public health and safety-based risk management services serving the interests of all stakeholders.*

This Standard is subject to revision.  
Contact NSF to confirm this revision is current.

Users of this Standard may request clarifications and interpretations, or propose revisions by contacting:

Chair, Joint Committee on Drinking Water Treatment Units  
c/o NSF International  
789 North Dixboro Road, P. O. Box 130140  
Ann Arbor, Michigan 48113-0140 USA  
Phone: (734) 769-8010 Telex: 753215 NSF INTL  
FAX: (734) 769-0109 E-mail: [info@nsf.org](mailto:info@nsf.org)  
Web: <http://www.nsf.org>

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 26, 2015

**Designated as an American National Standard**

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

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 – 2015.”

Copyright 2015 NSF International  
Previous edition © 2014, 2013, 2012, 2009, 2007, 2004, 1999, 1997, 1992, 1989

Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from NSF International.

Printed in the United States of America.

## Disclaimers<sup>1</sup>

NSF, in performing its functions in accordance with its objectives, does not assume or undertake to discharge any responsibility of the manufacturer or any other party. The opinions and findings of NSF represent its professional judgment. NSF shall not be responsible to anyone for the use of or reliance upon this Standard by anyone. NSF shall not incur any obligation or liability for damages, including consequential damages, arising out of or in connection with the use, interpretation of, or reliance upon this Standard.

NSF Standards provide basic criteria to promote sanitation and protection of the public health. Provisions for mechanical and electrical safety have not been included in this Standard because governmental agencies or other national standards-setting organizations provide safety requirements.

Participation in NSF Standards development activities by regulatory agency representatives (federal, local, state) shall not constitute their agency's endorsement of NSF or any of its Standards.

Preference is given to the use of performance criteria measurable by examination or testing in NSF Standards development when such performance criteria may reasonably be used in lieu of design, materials, or construction criteria.

The illustrations, if provided, are intended to assist in understanding their adjacent standard requirements. However, the illustrations may not include **all** requirements for a specific product or unit, nor do they show the only method of fabricating such arrangements. Such partial drawings shall not be used to justify improper or incomplete design and construction.

Unless otherwise referenced, the annexes are not considered an integral part of NSF Standards. The annexes are provided as general guidelines to the manufacturer, regulatory agency, user, or certifying organization.

---

<sup>1</sup> The information contained in this Disclaimer is not part of this American National Standard (ANS) and has not been processed in accordance with ANSI's requirements for an ANS. Therefore, this Disclaimer may contain material that has not been subjected to public review of a consensus process. In addition, it does not contain requirements necessary for conformance to the Standard.

This page is intentionally left blank.

## Contents

1	General.....	1
1.1	Scope .....	1
1.2	Minimum requirements.....	1
1.3	Chemical and microbiological reduction performance claims .....	1
1.4	Treatment train.....	1
1.5	Reviews and revisions.....	1
2	Normative references .....	2
3	Definitions .....	2
4	Materials .....	2
4.1	Materials in contact with drinking water .....	2
4.2	Materials evaluation .....	3
4.3	Gas chromatography/mass spectroscopy (GC/MS) analysis.....	5
5	Structural performance.....	14
5.1	Structural integrity.....	14
6	Minimum performance requirements.....	19
6.1	Total dissolved solids (TDS) reduction.....	19
6.2	Performance indication.....	23
6.3	Flow control .....	27
6.4	Storage tanks.....	27
6.5	Evaporator chamber.....	27
6.6	Openings and rims (product water zone) .....	27
6.7	Entry ports .....	27
6.8	Waste connections.....	28
6.9	Product water dispensing outlets.....	28
6.10	Active agents and additives .....	28
7	Elective performance claims – test methods .....	29
7.1	Inorganic chemical reduction claims qualified by TDS surrogate testing.....	29
7.2	Inorganic chemical reduction.....	29
7.3	In-place sanitization of the product water zone .....	33
7.4	Microbiological reduction.....	35
8	Instruction and information .....	39
8.1	Installation, operation, and maintenance instructions.....	39
8.2	Data plate .....	40
8.3	Replacement components.....	41
8.4	Performance data sheet.....	41
Annex A	.....	A1
Annex B	.....	B1
Annex C	.....	C1
Annex D	.....	D1

This page is intentionally left blank.

## **Foreword<sup>2</sup>**

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 26**

This revision added clarification regarding the maximum number of samples exposed in the Materials evaluation under section 4.

### **Issue 27**

This revision added criteria for utilizing a treatment train approach for the evaluation of a system containing multiple, sequential treatment technologies.

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](mailto:standards@nsf.org), c/o NSF International, Standards Department, P.O. Box 130140, Ann Arbor, Michigan 48113-0140, USA.

---

<sup>2</sup> The information contained in this Foreword is not part of this American National Standard (ANS) and has not been processed in accordance with ANSI's requirements for an ANS. Therefore, this Foreword may contain material that has not been subjected to public review of a consensus process. In addition, it does not contain requirements necessary for conformance to the Standard.

This page is intentionally left blank.

# 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.