



*NSF International Standard /  
American National Standard*

## NSF/ANSI 42 - 2016

Drinking Water Treatment Units -  
Aesthetic Effects



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

**Drinking water treatment units –  
Aesthetic effects**

Standard Developer

**NSF International**

**NSF International**

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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.

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## Foreword<sup>2</sup>

The purpose of this Standard is to establish minimum requirements for materials, design, construction, and performance of drinking water treatment units that are designed to reduce specific aesthetic-related contaminants in public or private water supplies. This Standard specifies the minimum product literature and labeling information that a manufacturer must supply to authorized representatives and system owners. Lastly, the Standard provides minimum service-related obligations that the manufacturer must extend to system owners.

This edition of the Standard contains the following revisions:

### Issue 75

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.

### Issue 88

Sampling point instructions for squeeze bottles in Annex E were clarified.

### Issue 92

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

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

Previous edition of NSF/ANSI 42	Current edition of NSF/ANSI 42
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 7.1
Table 8	Table 7.2
Table 9	Table 7.3
Table 10	Table 7.4
Table 11	Table 7.5
Table 12	Table 7.6
Table 13	Table 7.7
Table 14	Table 7.8
Table 15	Table 7.9
Table 16	Table 7.10
Table 17	Table 8.1
Table 18	Table 8.2

<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 or a consensus process. In addition, it does not contain requirements necessary for conformance to the Standard.

This Standard was developed by the NSF Joint Committee on Drinking Water Treatment Units using the consensus process described by the American National Standards Institute.

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), or c/o NSF International, Standards Department, P.O. Box 130140, Ann Arbor, Michigan 48113-0140, USA.

## NSF/ANSI Standard for Drinking Water Treatment Units –

# Drinking water treatment units – Aesthetic effects

## 1 General

### 1.1 Purpose

It is the purpose of this Standard to establish minimum requirements for materials, design and construction, and performance of drinking water treatment systems that are designed to reduce specific aesthetic-related (non-health effects) contaminants in public or private water supplies. This Standard also specifies the minimum product literature and labeling information that a manufacturer shall supply to authorized representatives and system owners as well as the minimum service-related obligations that the manufacturer shall extend to system owners.

### 1.2 Scope

The point-of-use and point-of-entry systems addressed by this Standard are designed to be used for the reduction of specific substances that may be present in drinking water (public or private) considered to be microbiologically safe and of known quality. Systems covered under this Standard are intended to reduce substances affecting the aesthetic quality of the water or to add chemicals for scale control, or both. Substances may be soluble or particulate in nature at concentrations influencing public acceptance of the drinking water. It is recognized that a system may be effective in controlling one or more of these substances but is not required to control all. Systems with components or functions covered under other NSF or NSF/ANSI standards or criteria shall conform to the applicable requirements therein.

### 1.3 Alternate materials, designs, and construction

While specific materials, designs, and construction may be stipulated in this Standard, systems that incorporate alternate materials, designs, and construction may be acceptable when it is verified that such systems meet the applicable requirements stated herein.

### 1.4 Chemical and mechanical reduction performance claims

**1.4.1** All NSF/ANSI 42 performance claims shall be verified and substantiated by test data generated under the requirements of NSF/ANSI 42.

**1.4.2** When performance claims are made for substances not specifically addressed in the scope of this Standard or for substances not specifically addressed but falling under the scope of NSF/ANSI 42, such claims shall be identified as not specifically addressed in the Standard.

### 1.5 Minimum requirements

This Standard establishes minimum requirements.

A system as defined in this Standard shall meet the applicable requirements of 4, 5, 6, and 8, and at least one performance claim as described in 7.