

NSF/ANSI 42 – 2002e

(includes 42 – 2002 addendums and editorial formatting changes)

Drinking water treatment units — Aesthetic effects

**NSF International Standard/
American National Standard**

NSF/ANSI 42 – 2002e



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NSF/ANSI 42 – 2002e

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

**Drinking water treatment units —
Aesthetic effects**

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Foreword²

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.

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:

- The material safety requirements of Table 1 in this Standards has been revised to recognize the 0.010 mg/L value as the Maximum Contaminant Concentration (MCC) for extraction of arsenic from drinking water treatment unit systems and components. This was published in the NSF/ANSI 42 – 2002 – Addendum.
- The term “permanent” when used with pressure vessels has been removed. These changes are reflected in the definitions section with the removal of permanent pressure vessel and with the deletion of “permanent” from table 5. Elimination of the definition does not change the intent or pass/fail criteria of the Standard. This was published in the NSF/ANSI 42 – 2002 – 2 Addendum.

NSF/ANSI 42 – 2002e was reformatted to make the Standard more user friendly. Some section headings have been modified to more accurately reflect the contents of the sections. Structural integrity is a stand alone section. For all substance claims being made, the claim, method, and sampling will be found under the substance heading. Tables and apparatus were moved to the appropriate sections for ease of use. Tables 5 & 12 were combined to form partial tables 7, 8, 9, 10, 11, & 13. Tables 7 & 12 were combined to form table 12. The table below details some of the more extensive reformatting changes.

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² 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. As such, 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.

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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. Comments should be sent to Chair, Joint Committee on Drinking Water Treatment Units, c/o NSF International, Standards Department, PO 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 comply with those applicable requirements.

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 making performance claims 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 42, those claims not specifically addressed in the Standard shall be so identified.