NSF International Standard /
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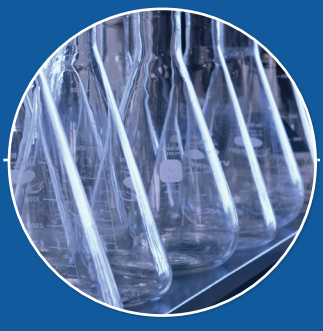
NSF/ANSI 58 - 2018

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

Reverse Osmosis Drinking Water Treatment Systems

Standard Developer
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Contents

Foreword[2]

The purpose of this Standard is to establish minimum requirements for materials, design and construction, and performance of point-of-use reverse osmosis drinking water treatment systems. NSF/ANSI 58 also specifies minimum product literature requirements that manufacturers must provide to authorized representatives and owners. Minimum service related obligations for manufacturers to extend to system owners are also specified in this Standard.

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 80

This revision addresses inconsistent language across the scopes of the DWTU Standards and adds clarifying language on systems that include components or functions covered under other NSF Standards.

Issue 82

This revision added a uranium reduction claim to Table 7.2 and Section 7.1.2.5.

Issue 83

The revision adds a performance reduction claim for perfluorocctanoic acid (PFOA) and perfluoroctane sulfonate (PFOS) for reverse osmosis (RO) systems.

Issue 85

Informational Annex G was added to notify the user of an upcoming ballot in 2019 to revise the current pass/fail criteria for lead reduction from 10 µg/L to 5 µg/L.

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

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NSF/ANSI Standard
for Drinking Water Treatment Units –

Reverse Osmosis Drinking Water Treatment Systems

1 General

1.1 Purpose

The purpose of this Standard is to establish minimum requirements for materials, design and construction, and performance of reverse osmosis (RO) drinking water treatment systems. This Standard also specifies the minimum product literature that manufacturers shall supply to authorized representatives and owners, as well as the minimum service-related obligations that manufacturers shall extend to system owners.

1.2 Scope

The point-of-use RO drinking water treatment 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 by this Standard are intended for reduction of total dissolved solids (TDS) and other contaminants specified herein. They may be chemical or particulate (including filterable cysts) in nature. 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, however, TDS testing is required. Systems with manufacturer claims that include components or functions covered under other NSF or NSF/ANSI Standards or Criteria shall conform to the applicable requirements therein. Systems covered by this Standard are not intended to be used with drinking water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

NOTE — Systems that are compliant with NSF/ANSI 55 Class A or other standards that cover technologies to treat microbiologically unsafe water (e.g., US EPA Guide Standard and Protocol for Testing Microbiological Water Purifiers or NSF P231) are examples of demonstrating adequate disinfection before or after the system.

1.3 Chemical and mechanical reduction performance claims

1.3.1 All NSF/ANSI 58 performance claims shall be verified and substantiated by test data generated under the requirements of NSF/ANSI 58.

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 58, 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 E.