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Residential Cation Exchange Water Softeners



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Chair, Joint Committee on Drinking Water Treatment Units c/o NSF International 789 North Dixboro Road, PO 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 Web: <www.nsf.org>

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

Residential Cation Exchange Water Softeners

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Contents

1 General			1
	1.1	Purpose	1
	1.2	Scope	
	1.3	Alternate materials, design, and construction	
	1.4	Treatment train	
2	Norm	native references	1
3	Defin	itions	2
4	rials	2	
4	mate	nais	Z
	4.1	Materials in contact with drinking water	2
	4.2	Materials evaluation	
	4.3	Gas chromatography / mass spectroscopy (GC/MS) analysis	5
5 Structural performance		tural performance	.11
	- 4		
	5.1	Structural integrity	11
6	Minin	num performance requirements	17
	C 4	Hazards	47
	6.1 6.2	Waste connections	
	6.2 6.3		
	6.4	Brine tank Operation	
	6.5 6.6	Performance indication Chemical and mechanical performance	
·			
1	7 Elective performance claims – Test methods		31
	7.1	Scope	31
	7.2	Barium and radium reduction	
	7.3	Conformance by calculation	35
8	Inetri	uction and information	38
0	moure		. 50
	8.1	Installation, operation, and maintenance instructions	
	8.2	Data plate	
	8.3	Performance data sheet	.40
An	nex A	Key elements of a certification program for drinking water treatment systems and	
	-	components	43
	A 4		40
	A.1	Marking the product	
	A.2	Listing certified companies	
	A.3	Annual audits	
	A.4	Testing	
	A.5	Toxicological evaluation of materials formulations	
	A.6	Corrective action	
	A.7	Enforcement.	
	A.8	Administrative review	
	A.9	Appeals	44

A.10	Complaints	45			
A.11	Advertising	45			
A.12	Advertising Records	45			
A.13	Public notice	45			
A.14	Confidentiality	45			
		-			
Annex B.		47			
		••			
Annex C	Evaluation methods for systems with multiple technologies – Treatment train	49			
		-			
C.1	Requirements for the evaluation of a system containing multiple, sequential treatment				
	ologies	49			
C.2	Example application of treatment train option B	50			
C.3	Example application of treatment train option C	51			
Interpreta	nterpretation Annex				

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.

This edition of the Standard contains the following revisions:

Issue 44

The 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.

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 –

Residential Cation Exchange Water Softeners

1 General

1.1 Purpose

The purpose of this Standard is to establish minimum requirements for materials, design and construction, and performance of residential cation exchange water softeners. 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 owners.

1.2 Scope

The manual, auto-initiated, and demand-initiated regeneration (DIR) residential cation exchange water softeners addressed by this Standard are designed 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 hardness affecting the aesthetic quality of water. The established health hazards, barium and radium, are optional performance claims addressed by this Standard. 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 Alternate materials, design, and construction

While specific materials, design, 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.

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 C.

2 Normative references

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