Table of Contents

Staying in the Know:
Updates to NSF/ANSI 60 and 61 ........................................ 3

Know Your Local
Drinking Water Requirements ........................................ 4

FAQ: Certified Components vs. End Products .............................. 7

NSF/ANSI/CAN 60 and FIFRA:
Scope Clarifications ......................................................... 10

Treatment Chemical Contact Products:
Section 5 & Section 8 Listing Differences ............................... 12

Ductile Iron Pipe and Fittings: The Scope of Associated Product Standards ......................................................... 14

Sodium Hypochlorite: Commercial Bleach and On-Site Generated Bleach ................................................................. 16

About the Authors ............................................................. 20

What we do at NSF International

Founded in 1944, NSF International is a global independent organization that writes standards, and separately, tests and certifies products for the water, food, health sciences and consumer goods industries to minimize adverse health effects and protect and improve human health.

Operating in more than 170 countries, NSF International is a Pan American Health Organization/World Health Organization (WHO) Collaborating Center on Food Safety, Water Quality and Indoor Environment.

NSF’s global water services include testing, certification and auditing for municipal water treatment components and chemicals, plastic piping systems, plumbing fixtures and fittings, point-of-use and point-of-entry water systems and filters.

Questions?

NSF International staffs a hotline to answer questions from consumers, regulators, water utilities and more.

If you want more information or want to confirm a product is certified by NSF International, contact the hotline at +1 800 673 8010 or info@nsf.org.

Check NSF’s official certification listings to confirm a product is certified by NSF International:
www.nsf.org/certified-products-systems

Drinking water system components and treatment chemicals are located near the bottom of this page.
Staying in the Know: Updates to NSF/ANSI 60 and 61

Two industry standards that have been around for over 30 years are going through a big change, and an exciting one! NSF/ANSI 60: Drinking Water Treatment Chemicals – Health Effects and NSF/ANSI 61: Drinking Water System Components – Health Effects are now accredited by the Standards Council of Canada (SCC) and are recognized as national standards in Canada (in addition to the United States).

So, what does that mean?

While the standards were only recently designated as National Standards of Canada, the previously published versions have been widely recognized in Canada for years. Now, the official names of the standards will change to reflect the official Canadian recognition and acceptance (i.e. NSF/ANSI/CAN 60 and NSF/ANSI/CAN 61). The NSF certification marks for both standards will also be updated and implemented over the next five years.

In addition to the newly published versions of the widely recognized standards, NSF International also published a companion standard, NSF/ANSI/CAN 600: 2018 Health Effects Evaluation and Criteria for Chemicals in Drinking Water. As a companion standard, NSF/ANSI/CAN 600 defines the toxicological review and evaluation procedures for specific chemical additives used in drinking water treatment products and plumbing system components. The standard establishes the human health risk, if any, of specific substances that may be imparted to drinking water under the anticipated use conditions of the product.

At NSF, we’re proud that these important industry standards will continue to help protect and improve public health.

UPCOMING TRAININGS

NSF/ANSI/CAN 60 Training
October 16, 2019
Ann Arbor, Michigan
Learn more: bit.ly/2U5mtvM

NSF/ANSI/CAN 61 Training
October 17, 2019
Ann Arbor, Michigan
Learn more: bit.ly/2D2mHOo

CUSTOM TRAININGS

If your company or water utility staff would like a custom training on standards, testing, certification or any other areas where NSF can be of assistance, contact us at info@nsf.org.

We can arrange an in-person or web-based training tailored to your needs.
In the U.S., states have primacy for compliance and enforcement of the federal Safe Drinking Water Act (SDWA) to protect public health (related to drinking water) and they carry this out through individual state regulations. The majority of state drinking water programs are located within state departments of health, environment and/or natural resources.

This group of drinking water administrators from the 50 U.S. states, the five U.S. territories, the Navajo Nation and the District of Columbia belong to a professional association serving state drinking water programs that was founded in 1984. The Association of State Drinking Water Administrators, more commonly referred to as ASDWA, supports states in their efforts to protect public health by collecting and providing information that assists administrators in the fulfillment of their duties. ASDWA promotes the adoption of responsible and feasible drinking water program requirements at the state and federal levels.

NSF International works with ASDWA and attends the organization’s annual conference each year to interact with state administrators on topics which include:

- Municipal water regulations
- New changes to requirements
- Continued collaboration to support public health and safe drinking water

**ASDWA Survey of Standard Adoption**


This document is intended to be used by consumers, municipalities and utilities, engineers and specifiers to quickly understand a state’s requirements for...
NSF/ANSI/CAN 60 and 61 compliance for water supply products. The survey contains quick reference color-coded maps that indicate whether a state requires compliance or certification to each standard.

For each U.S. state, the survey also indicates:

- If the compliance requirement is by legislation, regulation or policy
- The specific state citation of the requirement (if applicable)
- Effective date of the regulation/legislation and latest update
- If third-party certification to NSF/ANSI/CAN 60 and 61 by an ANSI-accredited certification body is required

As of early 2019, 49 U.S. states have requirements for products to comply with NSF/ANSI/CAN 60 and 61. Of those 49 states, the majority have specific requirements for the respective products to be certified (to NSF/ANSI/CAN 60 or 61) by an ANSI-accredited product certification body.

Requirements for Canadian Territories/Provinces

In addition to the information provided on the U.S. requirements, the NSF-published document also contains survey results conducted through Health Canada for the Canadian provincial and territorial drinking water agencies and their recognition of NSF/ANSI/CAN 60 and 61. Currently, nine of 13 provinces/territories require drinking water treatment chemicals to comply with NSF/ANSI/CAN 60 requirements and 11 provinces/territories require products to comply with NSF/ANSI/CAN 61 requirements.

(continued...)

Don’t know the difference between certification and compliance?

Check out this quick reference guide: bit.ly/2I5X08I
This information is also displayed with color coded maps and a detailed table of information.

If you are specifying a municipal bid or looking to purchase products used in a drinking water treatment facility or distribution system, referencing and understanding the requirements of your state is vital.

The NSF/ASDWA survey is one option for you to find the information that you are looking for, and the ASDWA website contains links to each of its primacy agency members’ web pages where you can access each state’s full requirements (bit.ly/2I7GDn2).

Manufacturers that obtain certification for their chemicals under NSF/ANSI/CAN 60 or their distribution system products under NSF/ANSI/CAN 61 go through a rigorous process that includes formulary reviews, product testing, facility inspection and documentation requirements. These activities occur initially (prior to certification) and also on an ongoing annual monitoring basis over time. This ongoing monitoring ensures that certified products continue to meet the requirements of the standards and provides verification that no harmful levels of contaminants are leaching out of the product, when the product is used under the certified parameters in the drinking water system. Products that have not undergone the rigorous process of third-party certification cannot make those independent, validated claims.

• Current NSF/ASDWA survey: bit.ly/2U4XHeW
• ASDWA drinking water primacy agencies: bit.ly/2I7GDn2
• Certification vs. compliance explanation: bit.ly/2I5X08l
• Health Canada: bit.ly/2D1CxsE

QUICK LINKS

Provincial/Territorial Adoption of NSF/ANSI/CAN 60

Provincial/Territorial Adoption of NSF/ANSI/CAN 61
State drinking water legislation requires equipment and products in contact with drinking water, from source to tap, to meet health and safety standards, including certification to NSF/ANSI/CAN 61. The certification of a finished product incorporates the evaluation and testing of all the included components, but the end-product certification does not extend to the components themselves.

In other words, components are not certified individually via testing of an end product. For example, if a peristaltic chemical pump is granted NSF/ANSI/CAN 61 certification, that does not mean the tubing used is by default also certified on its own.

Components seeking certification must go through the same rigorous technical review, production facility audit and extraction testing as certified finished products. Once completed, the component itself can bear the NSF mark to show certification to the appropriate standard.

In this article, we’ll cover some of the common questions we get about component certification.

What are some examples of certified components?

- O-rings
- Gaskets
- Pump mechanical seals
- Concrete aggregate
- And more

If an end product needs a separate certification, why do component manufacturers also seek certification?

Component certification provides:

- Improved acceptance as replacement parts by authorities having jurisdiction (AHJs)/regulators by verifying the components meet the most rigorous health requirements of NSF/ANSI/CAN 61 on their own
- Improved product quality, as certification can catch unknown supply chain changes
- Differentiation over other products
- A step toward end-product certification

(continued...)
Does an end product made up of mostly (or all) certified components have to go through the same testing as an end product made up of no individually certified components?

All certified products, whether a component or final end product, go through a rigorous technical review to ensure the finished product meets the health effects requirements of NSF/ANSI/CAN 61 on its own. That review determines the testing required and what compounds are of concern. Using components certified by NSF may impact that because we have already evaluated and tested those components.

Why should utilities look for certified components?

- An OEM replacement part isn’t always readily available.
- Certified components have potentially easier acceptance from AHJs when seeking replacement components.

How can I differentiate between a certified component and a certified end product in the NSF listings?

All certified materials, components and end products appear in the official online NSF certification listings. While we don’t specifically designate items as components in the listings, our online product listings can be searched in many ways. The best method of searching for a component, if you don’t already have a manufacturer or trade name selected, is by the product type you need (material, O-ring, adhesive, etc.).

Are the NSF certification marks different for certified components vs. end products?

The NSF mark for components and end products certified by NSF International to NSF/ANSI/CAN 61 is the same, except in the case of point-of-entry components, which use a specific NSF component mark. These are shown below.

Over the next five years, these marks will be slightly updated to reflect the new standard name of "NSF/ANSI/CAN 61." Products bearing the mark with "NSF/ANSI 61" or "NSF/ANSI/CAN 61" have equal meaning.

Want a detailed article on replacement components?

Check out Municipal Water Matters 2018: bit.ly/2wh1Z9J
IN 2019, NSF INTERNATIONAL IS
CELEBRATING 75 YEARS
of protecting and improving human health.

Our independent, global organization facilitates standards development, and tests, audits and certifies products for the food, water, health sciences, and consumer goods industries to minimize adverse health effects and protect the environment.

With operations in more than 175 countries, NSF is committed to protecting human health and safety worldwide. NSF International is a Pan American Health Organization/World Health Organization (WHO) Collaborating Center on Food Safety, Water Quality and Indoor Environment.

www.nsf.org
NSF/ANSI/CAN 60 and FIFRA: Scope Clarifications

Fact sheet for chemicals used in water treatment as disinfectants, algicides, bactericides, biocides and molluscicides.

Article by Blake Stark
General Manager
Treatment Chemicals and Media

We’ve received many questions regarding the scope of NSF/ANSI/CAN 60 certification, and the U.S. EPA’s Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA).

Certain categories of water treatment chemicals fall within the scope of both programs. This fact sheet provides information on the applicable certifications and/or registrations which are required for water treatment chemicals.
NSF/ANSI/CAN 60

Product certification to NSF/ANSI/CAN 60: Drinking Water Treatment Chemicals – Health Effects is required in most U.S. states and Canadian provinces and territories, and serves as an important tool to ensure the safety and suitability of chemicals used in the treatment of public drinking water supplies. This standard includes minimum requirements for the control of potential adverse health effects from chemicals (or associated contaminants within chemicals) added to water through its treatment, storage and distribution.

NSF/ANSI/CAN 60 was developed in 1988 at the request of the U.S. EPA Office of Water by a consortium of water supply stakeholder groups, including the American Water Works Association (AWWA) and the Association of State Drinking Water Administrators (ASDWA).

U.S. EPA FIFRA

FIFRA is the federal regulation that governs the registration, distribution, sale and use of pesticides in the U.S. The primary objective of FIFRA is to ensure that, when applied as instructed, pesticides will not generally cause unreasonable risk to human health or the environment. The EPA defines a pesticide as any substance or mixture of substances intended for preventing, destroying, repelling or mitigating any pest or intended for use as a plant regulator, defoliant, desiccant or nitrogen stabilizer.

Pesticide products, such as disinfectants, fall under the scope of FIFRA and require registration by the product manufacturer or distributor. Registration requires the chemical manufacturer to submit all requested applications and use instructions for the pesticide product to the EPA Office of Pesticides, as well as chemical information and safety data. The FIFRA registration program includes chemical label registration as well as monitoring of other parameters such as warning label information and product efficacy claims.

Important Similarities & Differences

The differences in scope between NSF/ANSI/CAN 60 and FIFRA can be hard to navigate, since there are chemicals that fall within the scope of both. What’s important to note is that the requirements of NSF/ANSI/CAN 60 and FIFRA are independent of one another, although both may apply to the same water treatment chemical product. In other words, FIFRA registration is not a requirement or pre-requisite of NSF/ANSI/CAN 60 for any chemical, and vice versa.

Location also plays a role – NSF/ANSI/CAN 60 addresses human health effects (exclusively) and is referenced globally as a standard for drinking water treatment chemicals, whereas the FIFRA requirements apply only to chemicals used in the U.S. Thus, based on where the chemical supplier is manufacturing, distributing, and selling its product, many chemicals are required by drinking water regulations to have both NSF/ANSI/CAN 60 certification and FIFRA registration.

While best known as the health effects standard for potable water, the scope of NSF/ANSI/CAN 61 also covers materials or products that come in contact with drinking water treatment chemicals.

This is important because contaminants that leach into drinking water treatment chemicals may then be inadvertently dosed into drinking water and eventually end up at a consumer’s tap, creating the potential for adverse health effects.

The drinking water treatment chemical-contacting products that are most typically certified under NSF/ANSI/CAN 61 include:

- On-site chemical generators
- Chemical feeders and metering pumps
- Chemical storage tanks

These product types all fall under Section 8 of the standard and must be tested with the drinking water treatment chemical or mixture of chemicals to which they are exposed in the field.

For example, complete chemical generation devices are tested by operating the device per the manufacturer’s instructions until the target dose level of chemical is achieved. The unit is then turned off for a four-hour period. Then the unit is powered back on, and a sample of chemical equivalent to the system volume is collected. Components of chemical generators, chemical feeders, chemical metering pumps and chemical storage tanks are tested via a four-hour static exposure of the product’s chemical contact surfaces with the appropriate chemical or chemical mixture.

Leaching profiles from materials in contact with drinking water treatment chemicals can differ significantly when compared to the same materials in contact with other chemicals or potable water. For this reason, water treatment chemical contact products are certified and listed for use with specific chemical types and concentrations.

For products that may contact multiple different types of water treatment chemicals, such as chemical metering pumps and chemical storage tanks, the manufacturer
must provide a complete list of chemicals with which they’d like their product evaluated. Use with any water treatment chemical other than those shown in the product listing are not covered by the scope of the certification. Similarly, tanks listed for storage of potable water under Section 5 of the standard have not been evaluated for use in chemical storage unless specifically indicated in a separate, Section 8 listing for chemical storage.

How do I differentiate these products in the NSF listings?

The mockups below show how the same product can be certified under Section 5 and Section 8 of NSF/ANSI/CAN 61 in NSF’s official certification listings. The listings for chemical evaluation (Section 8) and potable water (Section 5) are separate, even if the same product is being evaluated.

Section 8 Listing

<table>
<thead>
<tr>
<th>Mechanical Devices</th>
<th>Water Contact Temp</th>
<th>Water Contact Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical Storage Tanks [6] [G]</td>
<td>50 gal.</td>
<td>CLD 23</td>
</tr>
</tbody>
</table>

Section 5 Listing

<table>
<thead>
<tr>
<th>Protective (Barrier) Materials</th>
<th>Water Contact Temp</th>
<th>Water Contact Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tank [G]</td>
<td>50 gal.</td>
<td>CLD 23</td>
</tr>
</tbody>
</table>

Questions about certified products?

For questions about certified products, contact NSF International at info@nsf.org or +1 800 673 8010.

To find products certified by NSF International, visit our official certification listings:

www.nsf.org/certified-products-systems
Ductile iron pipe and fittings have been used in water distribution and wastewater systems for decades. NSF International has been certifying ductile iron pipe and fittings for use in drinking water distribution systems for years, and it’s important to understand the scope of these standards and their associated certifications to choose products that meet your state and local regulations.

Certifications available to this group of products include:

- NSF/ANSI/CAN 61: Drinking Water System Components - Health Effects
- NSF/ANSI 372: Drinking Water System Components - Lead Content
- ANSI/AWWA C115 - Flanged Ductile Iron Pipe
- ANSI/AWWA C606 - Grooved and Shouldered Joints

**NSF/ANSI/CAN 61**

NSF/ANSI 61/CAN certification covers materials and products that come in contact with drinking water or drinking water treatment chemicals, from source to tap. Certification to this standard ensures that the material or product does not impart contaminants above acceptable limits into potable water.

As such, while ductile iron pipes typically are coated internally and externally, NSF/ANSI/CAN 61 only addresses those surfaces normally in contact with the drinking water, and as a result the external pipe coatings are not addressed through this certification. Pipe and fittings certified by NSF meet the requirements set by state and provincial drinking water regulatory agencies in 49 U.S. states and 11 Canadian provinces/territories with requirements for NSF/ANSI/CAN 61 for municipal drinking water applications.

**NSF/ANSI 372**

NSF/ANSI 372 certification covers any drinking water system component that conveys or dispenses water for human consumption through drinking or cooking. This standard addresses the lead content based on the wetted surface areas of the product and contains criteria set forth in the Safe Drinking Water Act (SDWA) of the United States. Ductile iron pipe, fittings and components that are certified to this standard meet the weighted average lead content requirement of less than or equal to 0.25 percent.
ANSI/AWWA C115
The ANSI/AWWA C115 standard pertains to flanged ductile iron pipe 3-64 inches in diameter with threaded flanges for water supply. NSF International offers an audit-based certification to this standard, which includes ensuring that the pipe barrels conform to AWWA C115, verification of wall thickness, multiple requirements related to the flanges and bolts, finishes, cutting oil, pipe threading, pipe cleaning and marking and dimensioning.

ANSI/AWWA C606
ANSI/AWWA C606 addresses grooved and shouldered pipe joints for grooved ductile iron pipe 4-36 inches in diameter and 4-64-inch nominal diameter shoulder ends for ductile iron pipe. This standard provides minimum requirements that include materials, dimensions, tolerances, finishes, tests and testing procedures. NSF International offers an audit-based certification to this standard which addresses the minimum requirements of the standard. It is important to note that this standard does address the gaskets used, but it does not cover hydrostatic rating requirements for couplings or joints under section 5.2.

National Association of Pipe Fabricators’ NAPF QualityPlus™
NSF also serves as the independent third-party certifier for the National Association of Pipe Fabricators’ NAPF QualityPlus™ Certification Program. NSF provides certifications to NAPF’s members for the standards mentioned in this article. The National Association of Pipe Fabricators is a non-profit organization that was formed in 1977 and brings together ductile iron pipe fabricators, vendors and distributors to promote, support and educate members on industry standards, trends and guidelines.

LEARN MORE ABOUT THESE!
NSF/ANSI/CAN 61: bit.ly/2X8OVPn
NSF/ANSI 372: bit.ly/30QVM2s
ANSI/AWWA C606: bit.ly/2wlKnJZ
NAPF QualityPlus™: bit.ly/2Xd2IEG
Sodium Hypochlorite: Commercial Bleach (NSF/ANSI/CAN 60) & On-Site Generated Bleach (from NSF/ANSI/CAN 61 Certified Generator)

Water utilities that use sodium hypochlorite for drinking water disinfection have the option of using bleach sourced from a chemical vendor (commercial bleach) or producing bleach on-site through use of a chemical generator.

Read on for a summary of the NSF/ANSI/CAN standards that apply under each option.

Article by Blake Stark
General Manager
Treatment Chemicals and Media
Commercial Bleach for Drinking Water Treatment

Chemicals, including hypochlorite bleach, which are transported to utilities for use in drinking water treatment fall under the scope of NSF/ANSI/CAN 60: Drinking Water Treatment Chemicals - Health Effects. Information on the NSF/ANSI/CAN testing and evaluation parameters for sodium hypochlorite products can be found in the 2016 edition of Municipal Water Matters.

The NSF/ANSI/CAN 60 product certification listings for sodium hypochlorite products can be found by following the instructions found below.

► info.nsf.org/Certified/PwsChemicals

The NSF/ANSI/CAN 60 sodium hypochlorite certifications apply to the bleach products that appear in the NSF listings of each certified bleach production facility. Routine site audits of and testing and evaluation of products from each facility take place in support of the NSF/ANSI/CAN 60 bleach product certifications.

(continued...)

The NSF/ANSI/CAN 60 sodium hypochlorite certifications apply to the bleach products that appear in the NSF listings of each certified bleach production facility. Routine site audits of and testing and evaluation of products from each facility take place in support of the NSF/ANSI/CAN 60 bleach product certifications.
On-site Generated Bleach for Drinking Water Treatment

Many water utilities manufacture sodium hypochlorite through on-site generators (in lieu of, or in addition to, purchased bleach). On-site generators, including hypochlorite bleach generators, fall under the scope of NSF/ANSI/CAN 61: Drinking Water System Components - Health Effects. The NSF/ANSI/CAN 61 product certification listings for chemical generators can be found by following the instructions found below.

info.nsf.org/Certified/PwsComponents/index.asp?standard=061

Hypochlorite Treatment Chemicals Specifications in NSF/ANSI Standard 60

Bromate

The EPA Disinfectants and Disinfection Byproducts Rule establishes an MCL of 10 ppb for bromate ion. As hypochlorite treatment chemicals, in addition to ozonation systems, are a known potential contributing source of bromate ion to drinking water, the single product allowable concentration (SPAC) for bromate in NSF/ANSI 60 was established at 3.3 ppb (one-third of the EPA MCL). Thus, an NSF/ANSI 60 compliant chemical is verified not to contribute more than 3.3 ppb bromate ion, when dosed into drinking water at its maximum use level.

In addition, as many water utilities manufacture sodium hypochlorite chemicals through on-site hypochlorite generators (in lieu of, or in addition to, purchased bleach), criteria were also established in NSF/ANSI 60 to address the bromate-forming potential of sodium chloride salt, which is used as the feedstock for on-site hypochlorite generators. Many natural salt formations contain a small level of bromide, which can form and release bromate ion during the electrochlorination process when hypochlorite effluent is generated.

Under the NSF/ANSI 60 requirements for electrochlorination salt:

1. Each certified manufacturer provides a declaration of the maximum bromide concentration of the product.
2. Analytical verification is then made by the product certifier, on an annual basis, that the product's bromide concentration is less than or equal to the product specification.
3. The product's bromide specification may not exceed 59 kg in sodium chloride salt for electrolytic hypochlorite generators at a maximum feed rate of 10 mg/L (as chlorine) + .
4. A higher concentration of bromide is permitted in NaCl salt used in generators that deliver lower maximum feed concentrations of chlorine, so that the total concentration of bromate does not exceed 3.3 ppb.
5. The 50 mg/kg limit is based on a base assumption that 3.3 ug/L (ppb) bromate will be produced from 3.5 pounds of NaCl containing 59 mg/kg bromide with 15 gallons of water to produce (via electrolysis) one pound of free available chlorine (FAC) equivalent disinfectant and dosed to affect a 10 mg/L FAC in the finished drinking water.

Perchlorate

Following the EPA draft health advisory of 15 ppb for perchlorate, and state regulatory limits for perchlorate established in California (6 ppb) and Massachusetts (2 ppb), NSF/ANSI 60 includes a general perchlorate SPAC/limit of 5 ppb (one-third of the EPA health advisory level) for all hypochlorite products.

In addition, bleach manufacturers want more information about NSF/ANSI/CAN 60 evaluation parameters for electrochlorination salt? Check out Municipal Water Matters 2016 here: bit.ly/2wovTcb
Always “Take Note” of the Footnotes!

The associated footnotes shown in each of the chemical generator listings designate the chemical effluent produced from the certified generator (example: sodium hypochlorite for bleach generators).

The NSF/ANSI/CAN 61 chemical generator certifications apply to the generators that appear in the NSF listings of each certified facility. Routine site audits of the generator assembly facility are conducted and testing and evaluation of effluent chemical from a representative generator take place in support of the NSF/ANSI/CAN 61 chemical generator certifications. The effluent chemical sample, used for product analysis, is prepared by NSF International after operating the generator in accordance with the manufacturer’s published instructions.

It is important for on-site producers of treatment chemicals to follow the manufacturer’s use instructions closely, to ensure that the effluent chemical produced meets established specifications. One key component of the manufacturer’s use instructions is the designated feed stock chemical(s) that are specified for use in the certified generator. For example, many sodium hypochlorite generator instructions specify that an NSF/ANSI/CAN 60-certified salt should be used as the generator feed stock.

The NSF/ANSI/CAN 60 product certification listings for sodium chloride salt can be found following the instructions found below.

Salt Products Certified for Electrochlorination End Use

The certification listings for salt products that have been certified for the electrochlorination end use have a footnote in their listings stating, “Certified for use in the electrochlorination process for on-site disinfectant generators.” In addition, the listing footnotes specify the maximum disinfectant feed concentration of the salt that has been established as part of the use restrictions of the salt product.

If you have questions about certified bleach products, please contact NSF’s consumer and regulatory hotline at +1 800 673 8010 or info@nsf.org.
About the Authors

Blake Stark
General Manager, Treatment Chemicals and Filtration Media
stark@nsf.org
Blake Stark is the General Manager of NSF’s Treatment Chemicals and Filtration Media programs and works with NSF’s global testing, auditing and certification of these products. Stark has worked as a key member of the NSF International staff for over 25 years, holding important roles in the water treatment area and, before that, serving as an NSF product auditor on the Field Services team.

David Nance
Business Unit Manager, Water Distribution and Recreational Water Products
dnance@nsf.org
David Nance is the Business Unit Manager for NSF International’s Municipal Water Products and Recreational Water Products and works with NSF’s global testing, auditing and certification services for distribution system components and recreational water products. Nance has nine years of experience in the Municipal Water Products program.

Kathryn Foster
Technical Operations Manager, Water Distribution Systems
kfoster@nsf.org
Kathryn Foster is the Technical Operations Manager for Water Distribution Systems at NSF International. Foster has over 10 years of experience overseeing the evaluation of products to NSF/ANSI/CAN 61, and NSF/ANSI 372 and 50. She is the current voting member for NSF International on the Joint Committee on Drinking Water Additives with oversight of NSF/ANSI/CAN 61 and NSF/ANSI 372.

Theresa Bellish
General Manager, Municipal Water Products
bellish@nsf.org
Theresa Bellish is the General Manager of NSF International’s Municipal Water Products Division and works with NSF’s global testing, auditing and certification services for drinking water treatment chemicals, distribution system components and recreational water products. Bellish has a long-standing career at NSF with over 19 years of experience in the water industry.
CONTACT US

For more information, visit www.nsf.org or contact info@nsf.org.

NSF INTERNATIONAL
789 N. Dixboro Road Ann Arbor, MI 48105 USA
T +1 800 673 8010
E info@nsf.org
www.nsf.org
# PRODUCT STANDARDS & THE WATER SYSTEM

## Source (Aquifer, Lake, Well, Etc)
- **NSF/ANSI/CAN 61**
  - Intake grates
  - Well casings
  - Submersible pumps and motors
- **NSF/ANSI/CAN 60**
  - Well drilling aids
  - Well rehabilitation aids
  - Algaecides
  - Disinfectants

## Water Treatment Plant
- **NSF/ANSI/CAN 61**
  - Treatment tanks
  - Filter underdrains
  - Municipal water filters
  - Chemical generators
  - Chemical feeders and pumps
  - Chemical storage tanks
  - Filtration media
- **NSF/ANSI/CAN 60**
  - Coagulants/flocculants
  - pH adjusters
  - Disinfectants
  - Corrosion and scale control
  - RO antiscalants
  - Fluoridation

## Reservoirs & Storage Tanks
- **NSF/ANSI/CAN 61**
  - Water storage tanks
  - Tank and reservoir liners
  - Tank coatings
  - Static mixers

## Distribution System
- **NSF/ANSI/CAN 61**
  - Pipes and fittings
  - Valves
  - Fire hydrants
  - Pipe coatings
- **NSF/ANSI 14**
  - Large diameter plastic pipe

## Homes & Businesses
- **NSF/ANSI/CAN 61**
  - Pipes and fittings
  - Water meters
  - Faucets and components
  - Point-of-entry filters
- **NSF/ANSI 14**
  - Plastic pipe
  - Fittings for plastic pipe

## Sewer Lines & Commercial Wastewater
- **NSF/ANSI 14**
  - Drain, waste, vent pipe and fittings
  - CIPP liners for sewer

**Note:** This infographic is a quick-reference guide and is not a comprehensive list of all products. **Have questions?** Email us at info@nsf.org.