



WHITE PAPER

Guide to Compliance: North American Water Products

Access the United States and Canadian markets

Safety. Science. Transformation.™

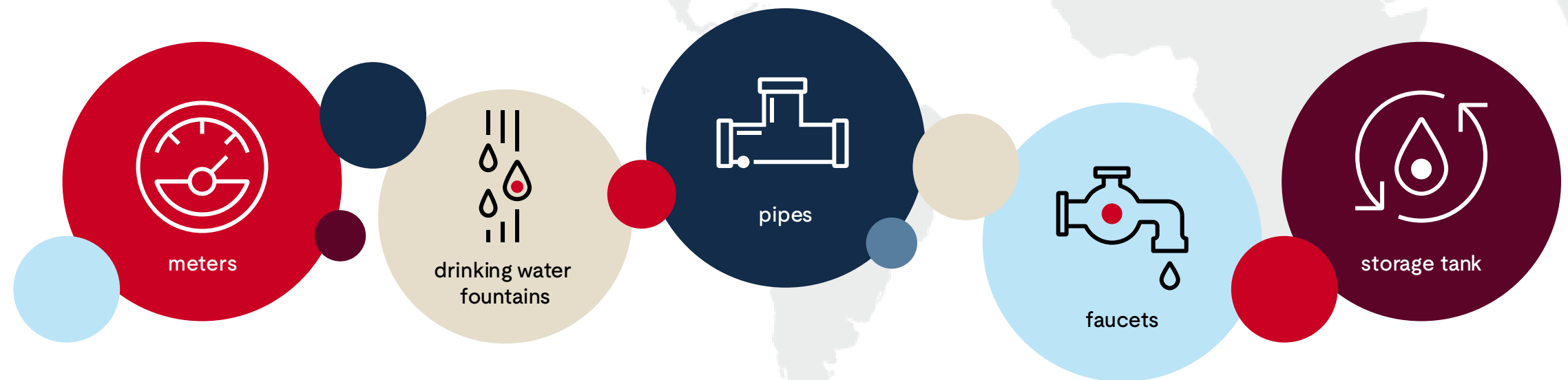


Introduction

In North America, both water and drinking water system components — fittings, fixtures and pipes that carry water — must undergo testing and inspection and earn certification to ensure that they function properly and are safe to use.

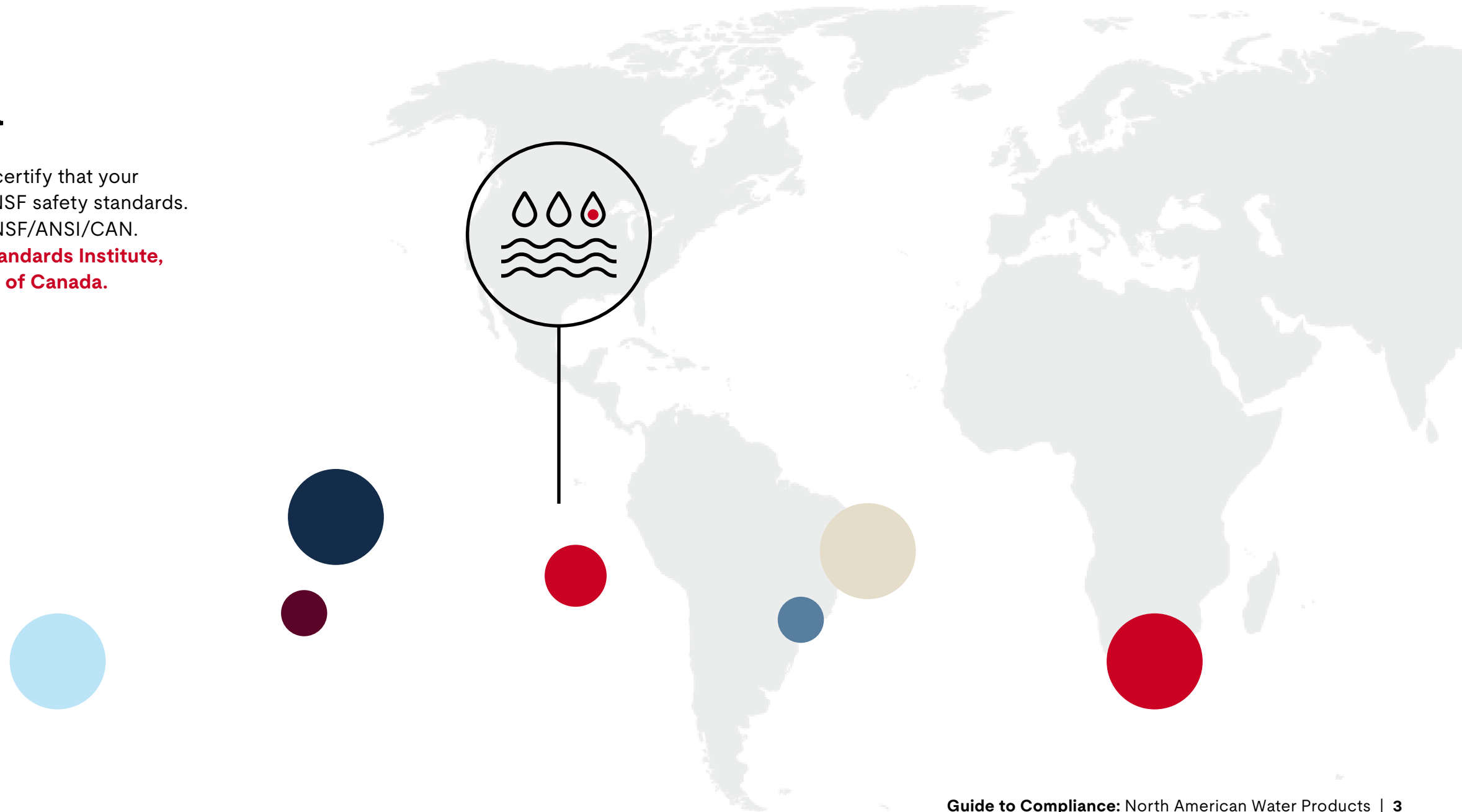
Testing and certification help build customer trust and loyalty, enhance your brand's reputation and give you a competitive edge in the marketplace. In North America, testing and certification for water and drinking water system components are regulatory necessities.

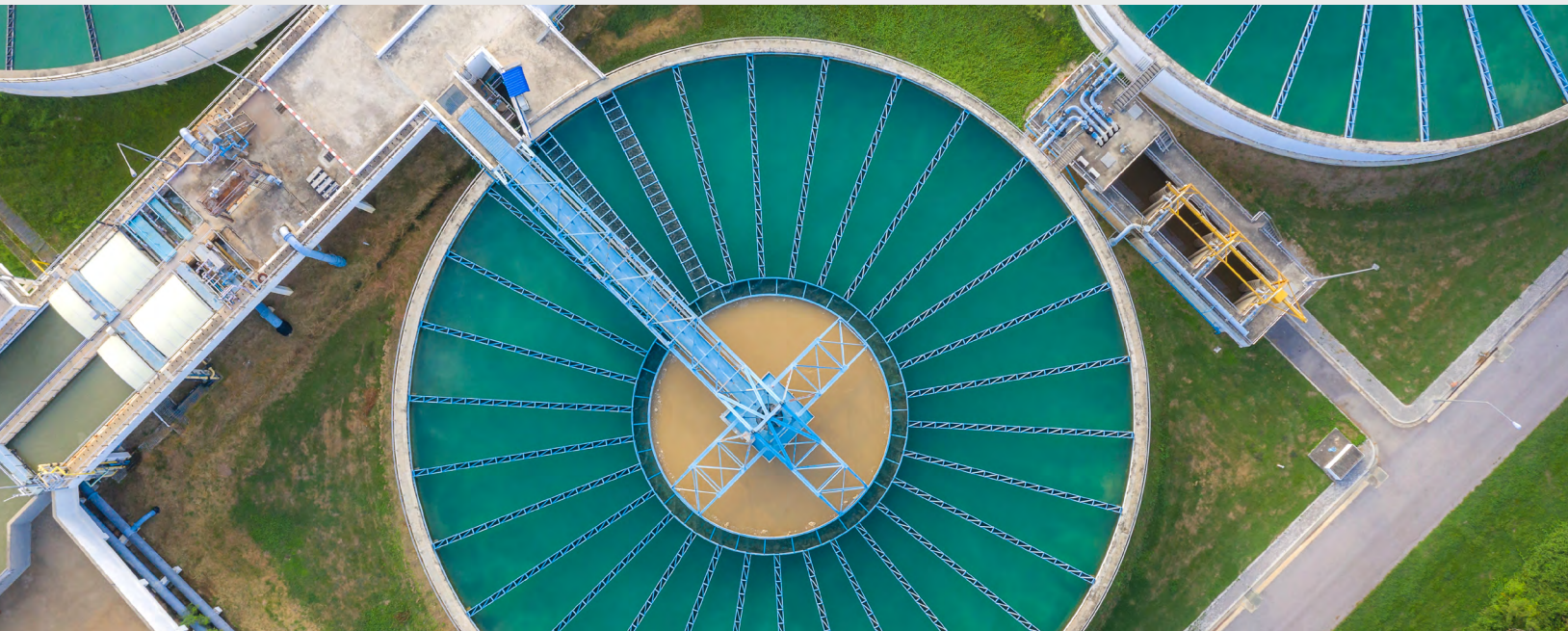
Because water can absorb substances from anything it touches, all plumbing materials used in potable water supplies must undergo testing and certification to meet industry safety standards.



Access to North America

At UL Solutions, we can test, inspect and certify that your drinking water system components meet NSF safety standards. The full prefix for these NSF standards is NSF/ANSI/CAN. ANSI stands for the **American National Standards Institute**, and CAN refers to the **National Standards of Canada**.





REGULATION

NSF/ANSI/CAN 60

Drinking Water Treatment Chemicals – Health Effects

General information

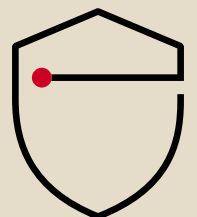
NSF/ANSI/CAN 60 establishes minimum health effects requirements for the chemicals, chemical contaminants and impurities directly added to water for its treatment. It includes chemicals that may or may not be intentionally present in the finished water.



UL Solutions' services for drinking water treatment chemicals help manufacturers, blenders, repackagers and transfer facilities bring certified chemicals to market quickly. Whether used in a public water system or a private well, the chemicals added to our water can impact the quality of what we drink. If your company manufactures, dilutes or repackages drinking water treatment chemicals, most agencies that regulate drinking water in the United States and Canada mandate certifying your products to NSF/ANSI/CAN 60. Testing and certification through UL Solutions helps you demonstrate to regulators, water systems and other buyers that your products meet the applicable health effects requirements.

For **NSF/ANSI/CAN 60** compliance, UL Solutions evaluates the following types of water additives:

- Corrosion and scale inhibitors
- Coagulants and flocculants
- Disinfection and oxidation chemicals
- pH adjustment
- Softening
- Precipitation and sequestering chemicals
- Well-drilling aids
- Specialty chemicals





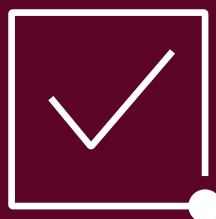
REGULATION

NSF/ANSI/CAN 61

Drinking Water System Components – Health Effects

General information

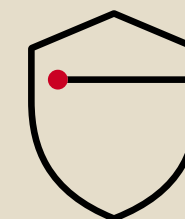
NSF/ANSI/CAN 61 establishes minimum health effects requirements for the chemical contaminants and impurities directly imparted to drinking water from products, components and materials used in drinking water systems.



From water treatment to the tap in your home, products that come into contact with drinking water can impact the quality of what we drink. If your company manufactures devices, components or materials, your products will require evaluation for health effects and lead content to meet regulatory requirements in the United States and Canada. UL Solutions certification helps you protect your brand and mitigate product material-related risks for your buyers and users. For NSF/ANSI/CAN 61 compliance, UL Solutions evaluates the following products that come into contact with drinking water:

- Joining and sealing materials, including gaskets, lubricants, sealants and grouts
- Barrier materials, including paints, coatings, cement, additives and tank liners
- Pipes and fittings, couplings, flexible and rigid tubing, tapping sleeves and hoses
- Mechanical devices, including service saddles, water meters, valves, pumps, chemical feeders and hydrants
- Plumbing devices, including faucets, drinking fountains and refrigerator ice makers
- Process media including carbon, aluminum silicates, ion exchange resins and sand
- Plastic materials, including acrylonitrile butadiene styrene (ABS), nylon, polycarbonate, polyethylene and polyvinyl chloride (PVC)

If drinking water does not meet NSF/ANSI/CAN 61 standards, it may contain unsafe levels of contaminants and cause health issues.





REGULATION

NSF/ANSI/CAN 372

Drinking Water System Components – Lead Content

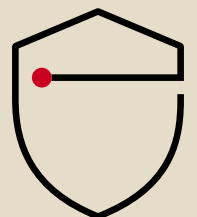
General information

NSF/ANSI/CAN 372 establishes a standardized methodology for determining and verifying product compliance to minimize lead contaminants in drinking water systems.



For **NSF/ANSI/CAN 372 compliance**, UL Solutions evaluates whether a product's wetted surface has a verifiable lead content of no more than 0.25% — the benchmark for a “lead-free” label on pipes, pipe fittings and plumbing fittings and fixtures. The maximum weighted lead average for solder and flux is 0.2%. NSF/ANSI/CAN 372 covers products that convey or dispense water for human consumption through drinking or cooking. Most products within the scope of NSF/ANSI/CAN 372 are also under the scope of NSF/ANSI/CAN 61.

The U.S. Reduction of Lead in Drinking Water Act (2011) sets requirements for lead content and requires third-party certification of products that convey drinking water. Certification through UL Solutions to NSF/ANSI/CAN 372 provides the most effective way to show buyers and regulators that you adhere to the law.





REGULATION

NSF/ANSI/CAN 600

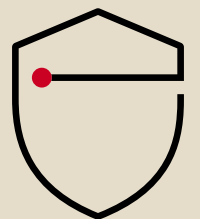
Health Effects Evaluation and Criteria for Chemicals in Drinking Water

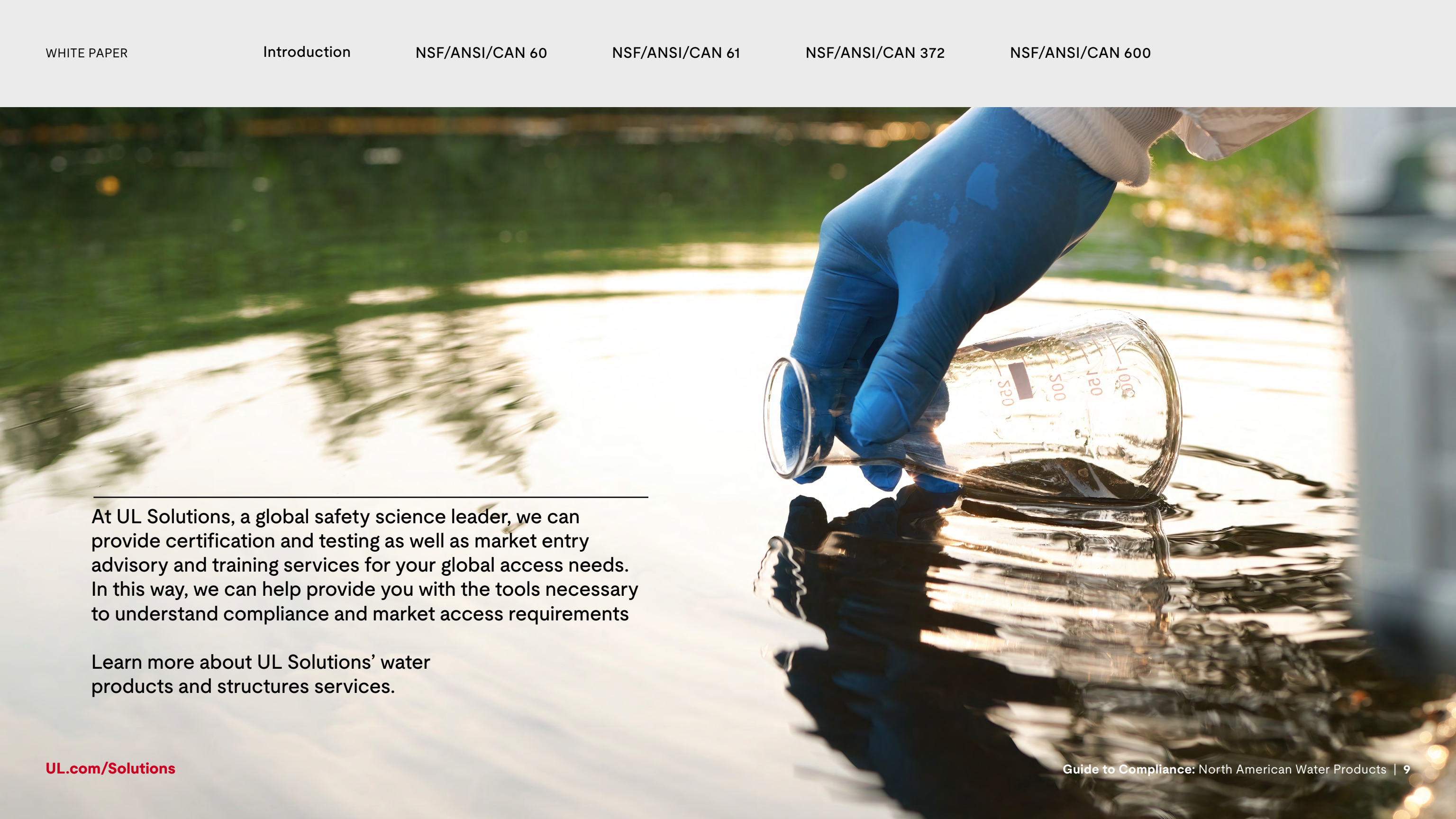
General information

NSF/ANSI/CAN 600 establishes toxicological review and evaluation procedures for treatment chemicals and drinking water system components. NSF/ANSI/CAN 600 defines compliance/noncompliance criteria as well as tests to show how products meet that criteria. The standard specifically accommodates new criteria and testing for BTEX chemicals (benzene, toluene, ethylbenzene and xylene), but it covers the criteria and testing for all contaminants. NSF/ANSI/CAN 600 serves as a common reference standard to NSF 60 and 61, its content previously existed in the annexes of the 2 standards.



For NSF/ANSI/CAN 600 compliance, UL Solutions follows the requirements for testing and compliance/noncompliance criteria to determine maximum contaminant levels (MCLs) in drinking water resulting from the use of treatment chemicals and drinking water system components.





At UL Solutions, a global safety science leader, we can provide certification and testing as well as market entry advisory and training services for your global access needs. In this way, we can help provide you with the tools necessary to understand compliance and market access requirements

Learn more about UL Solutions' water products and structures services.



[UL.com/Solutions](https://www.ul.com/Solutions)