



NSF 61, NSF 372 AND LEAD CONTENT

What are the requirements for NSF/ANSI Standard 61 and lead?

NSF/ANSI Standard 61: *Drinking Water System Components - Health Effects* was published in 1988 to establish minimum requirements for the control of potential adverse human health effects from products that contact drinking water. NSF/ANSI 61 contains requirements that restrict both 1) the level of lead that can be contained in water contact materials of drinking water products, and 2) the level of lead that can extract out of the product and into drinking water.

Lead Content Requirements

Restriction on the Use of Lead-Containing Materials

Section 3.5 of NSF/ANSI 61 precludes the use of lead as an intentional additive in wetted materials and components of products, with the exception of brass and bronze meeting the definition of “lead free” within the specific provision of the U.S. Safe Drinking Water Act (SDWA). Through 2013, this has been applied under NSF/ANSI 61 as brass or bronze containing no more than 8 percent lead. Products are also required to comply with all chemical extraction requirements of NSF/ANSI 61, including lead.

In 2011, U.S. federal legislation passed that revised the definition of “lead free” within the SDWA. In brief, the definition now requires that the wetted surfaces of pipes, pipe fittings, plumbing fittings and fixtures meet a weighted average lead content of no more than 0.25 percent. The changes in the SDWA are set to take effect January 4, 2014. As Section 3.5 of NSF/ANSI 61 requires that products comply with the lead-free requirements of the SDWA, all NSF/ANSI 61 products falling into the scope of the legislation are also required to comply with the new 0.25 percent maximum lead content requirement. The date of this required compliance under NSF/ANSI 61 is the same as the effective date in the SDWA, January 4, 2014.

NSF 372 and NSF 61 Annex G

NSF/ANSI 61 was revised in December 2008 to establish requirements for use when a 0.25 percent lead content requirement needs to be met in addition to current chemical extraction requirements of the standard. The requirements were placed in Annex G - Weighted Average Lead Content Evaluation Procedure to a 0.25 percent Lead

Requirement. A request was made to add these requirements to the standard to allow manufacturers the option of being certified to a lead content standard, such as the California Health and Safety Code (Section 116875), commonly known as AB1953. That law, which went into effect January 1, 2010, applies to any pipe, pipe or plumbing fitting, or fixture intended to convey or dispense water for human consumption through drinking or cooking. Similar laws have since been enacted in Vermont, Maryland and Louisiana, and will take effect nationally through the revised U.S. SDWA in 2014.

In 2010, the lead content evaluation procedures of Annex G were moved to NSF/ANSI 372: *Drinking Water System Components - Lead Content*, and Annex G was updated to simply reference it. Movement of the procedures from Annex G to NSF/ANSI 372 allowed for their application on products beyond the scope of NSF/ANSI 61 like drinking water treatment units and food service equipment. It also allowed for citing compliance separate from NSF/ANSI 61 for those jurisdictions wishing to do so.

At the same time Annex G procedures were moved to NSF/ANSI 372, the annex was balloted to be retired three years later. The end of that three-year period is October 2013. Although Annex G will be retired from NSF/ANSI 61, NSF will continue to support the “-G” certification marks as long as they are of value. This is anticipated to be for a number of years as they provide a simple mechanism of denoting compliance with both the chemical extraction requirements of NSF/ANSI 61 and the new “lead-free” requirements of U.S. state and federal laws.

Currently, all products certified by NSF as compliant with Annex G are also compliant with NSF/ANSI 372. No additional testing is required beyond the normal routine monitoring of certified products. The listings of products currently certified by NSF to Annex G will continue to bear the [G] certification footnote:

[Current footnote]

[G] Product complies with NSF/ANSI 61 Annex G, NSF/ANSI 372 and conforms with lead content requirements for “lead-free” plumbing as defined by California, Vermont, Maryland, and Louisiana state laws and the U.S. Safe Drinking Water Act due to take effect January 2014.

[Future footnote]

[G] Product complies with NSF/ANSI 372 and conforms with lead content requirements for “lead-free” plumbing as defined by California, Vermont, Maryland, and Louisiana state laws and the U.S. Safe Drinking Water Act in effect as of January 4, 2014.

For questions or concerns regarding the evaluation of lead under NSF/ANSI 61 or NSF/ANSI 372, please contact Pete Greiner at (734) 769-5517.

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