

ANSI/AWWA **C521-23**
(Revision of *ANSI/AWWA C521-18*)

AWWA Standard

Plastic Ball Valves

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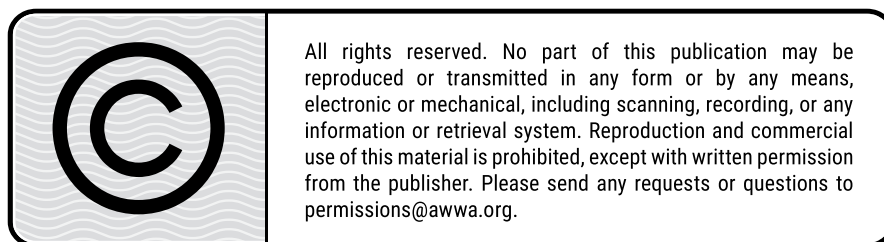
AWWA Standard

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Foreword

This foreword is for information only and is not a part of ANSI/AWWA C521.*

I. Introduction.

I.A. *Background.* Plastic ball valves have been in use since the 1950s. In 2001, the AWWA Standards Council received a request to develop a standard for plastic ball valves. As a result of this request, the AWWA Standards Council formed an exploratory ad hoc committee “to consider plastic ball valves, and to determine how best to arrive at an appropriate AWWA standard for such valves.”

The ad hoc committee recommended “that the AWWA Standards Council establish a standards committee for the development of a standard in one document for plastic ball valves for water and other liquids as appropriate.” On June 7, 2002, the council established the AWWA Standards Committee on Plastic Valves, and the committee held its first meeting at AWWA’s Annual Conference and Exhibition (ACE) 2006.

I.B. *History.* The first edition of this standard was designated [ANSI/AWWA C521-18](#), Plastic Ball Valves. The AWWA Board of Directors approved the first edition on October 24, 2018. This edition was approved on October 23, 2023.

I.C. *Acceptance.* In May 1985, the US Environmental Protection Agency (USEPA) entered into a cooperative agreement with a consortium led by NSF International (NSF) to develop voluntary third-party consensus standards and a certification program for direct and indirect drinking water additives. Other members of the original consortium included the Water Research Foundation (formerly AwwaRF) and the Conference of State Health and Environmental Managers (COSHEM). AWWA and the Association of State Drinking Water Administrators (ASDWA) joined later.

In the United States, authority to regulate products for use in, or in contact with, drinking water rests with individual states.[†] Local agencies may choose to impose requirements more stringent than those required by the state. To evaluate the health effects of products and drinking water additives from such products, state and local agencies may use various references, including

1. Specific policies of the state or local agency.

* American National Standards Institute, 25 West 43rd Street, Fourth Floor, New York, NY 10036.

[†] Persons outside the United States should contact the appropriate authority having jurisdiction.

2. Four standards developed under the direction of NSF[‡]: NSF/ANSI/CAN[§] 60, Drinking Water Treatment Chemicals—Health Effects, NSF/ANSI/CAN 61, Drinking Water System Components—Health Effects, NSF/ANSI/CAN 372, Drinking Water System Components—Lead Content, and NSF/ANSI/CAN 600, Health Effects Evaluation and Criteria for Chemicals in Drinking Water.

3. Other references, including AWWA standards, *Food Chemicals Codex*, *Water Chemicals Codex*,[¶] and other standards considered appropriate by the state or local agency.

Various certification organizations may be involved in certifying products in accordance with NSF/ANSI/CAN 61. Individual states or local agencies have authority to accept or accredit certification organizations within their jurisdiction. Accreditation of certification organizations may vary from jurisdiction to jurisdiction.

NSF/ANSI/CAN 600 (which formerly appeared in NSF/ANSI/CAN 60 and 61 as Annex A, “Toxicology Review and Evaluation Procedures”) does not stipulate a maximum allowable level (MAL) of a contaminant for substances not regulated by a USEPA final maximum contaminant level (MCL). The MALs of an unspecified list of “unregulated contaminants” are based on toxicity testing guidelines (noncarcinogens) and risk characterization methodology (carcinogens). Use of NSF/ANSI/CAN 600 procedures may not always be identical, depending on the certifier.

ANSI/AWWA C521 does not address additives requirements. Users of this standard should consult the appropriate state, provincial, or local agency having jurisdiction in order to

1. Determine additives requirements, including applicable standards.
2. Determine the status of certifications by parties offering to certify products for contact with, or treatment of, drinking water.
3. Determine current information on product certification.

II. Special Issues.

II.A. *Materials.* The materials section of this standard recognizes the advances that have been made in the development of nonmetallic materials for water ball valve construction. Plastic materials are currently being used for water ball valves; because of continual development of new and improved materials, this standard does not require any one specific material but cites examples of materials defined by ASTM

[‡] NSF International, 789 North Dixboro Road, Ann Arbor, MI 48105.

[§] Standards Council of Canada, 55 Metcalfe Street, Suite 600, Ottawa, ON K1P 6L5 Canada.

[¶] Both publications available from National Academies Press, 500 Fifth Street, NW, Washington, DC 20001.