ANSI/AWWA **B201-25**

(Revision of ANSI/AWWA B201-18)

AWWA Standard

Soda Ash

Effective date: Oct. 1, 2025.

First edition approved by Board of Directors July 1, 1949.
This edition approved Jan. 23, 2025.
Approved by American National Standards Institute Jan. 23, 2025.

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ISBN-13, print: 978-1-64717-269-5

ISBN-13, electronic: 978-1-61300-790-7

DOI: http://dx.doi.org/10.12999/AWWA.B201.25

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Foreword

This foreword is for information only and is not a part of ANSI/AWWA B201.*

I. Introduction.

I.A. *Background.* Soda ash is the common name for the technical grades of anhydrous sodium carbonate (Na_2CO_3). Light and dense soda ash differ in physical characteristics only, such as density (weight of unit volume), angle of repose, and size and shape of particles. Light soda ash is a powder; dense soda ash is granular.

Soda ash is an anhydrous material having a sodium carbonate content of more than 99 percent and a sodium oxide (Na_2O) equivalent of more than 57.9 percent. Sodium carbonate, although readily soluble in water, has the unusual characteristic of attaining maximum solubility at 95.7°F (35.4°C). At this temperature, 100 parts of water dissolve 49.7 parts of sodium carbonate. The solubility of sodium carbonate decreases at temperatures above and below 95.7°F (35.4°C).

I.B. *History.* The first edition of this standard for soda ash was prepared under the direction of the AWWA Water Purification Division. The standard was approved by the Executive Committee of the Water Purification Division and by the Water Works Practice Committee and received approval of the AWWA Board of Directors on July 1, 1949. Additional reviews resulted in an edited copy that was reaffirmed and approved as "Tentative" on Oct. 15, 1951. The initial document was made standard on May 15, 1953. This standard was revised by the AWWA Standards Committee on Softening and Conditioning Chemicals. Subsequent editions of ANSI/AWWA B201 were approved on Jan. 26, 1959; Jan. 28, 1974; Jan. 28, 1980; June 14, 1987; Jan. 26, 1992; Jan. 25, 1998; Jan. 19, 2003; Jan. 27, 2008; June 9, 2013; and Oct. 24, 2018. This edition was approved on Jan. 23, 2025.

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.

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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 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 372, Drinking Water System Components—Lead Content; and NSF/ANSI/CAN 600, Health Effects Evaluation and Criteria for Chemicals in Drinking Water.

Various certification organizations may be involved in certifying products in accordance with NSF/ANSI/CAN 60. 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 B201 addresses additives requirements in Sec. 4.3.2 of the standard. The transfer of contaminants from chemicals to processed water or to residual solids is becoming a problem of greater concern. The language in Sec. 4.3.2 is a recommendation only for direct additives used in the treatment of potable water to be certified by an accredited certification organization in accordance with NSF/ANSI/CAN 60, Drinking Water Treatment Chemicals—Health Effects. However, users of the standard may opt to make this certification a requirement for the product. Users of this standard should consult the appropriate state 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.

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

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

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

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