

American Water Works Association

ANSI/AWWA B502-94

(Revision of ANSI/AWWA B502-88)



AWWA STANDARD
FOR
SODIUM POLYPHOSPHATE, GLASSY
(SODIUM HEXAMETAPHOSPHATE)



Addendum B502a-97 is incorporated into this standard.

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AMERICAN WATER WORKS ASSOCIATION

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Foreword

This foreword is for information only and is not a part of AWWA B502.

I. Introduction

I.A. *Background.* Sodium polyphosphate, glassy, is a manufactured product obtained by combining comparatively pure chemicals — soda ash (Na_2CO_3) or caustic soda (NaOH) — with phosphoric acid. Although the resulting product is consistent in quality and content, each manufacturer may produce it in several different physical forms (see Sec. 4). The density of crushed or granular material is approximately 80 lb/ft^3 (approximately $1,280 \text{ kg/m}^3$). A solution of 2 lb/gal (0.24 kg/L) has a specific gravity of approximately 1.2.

The uses of sodium polyphosphate, glassy, include corrosion control, scale prevention, iron and manganese stabilization, and sequestering of metallic ions. The chemical is available in a wide range of physical forms and sizes, allowing flexibility in the type of dissolving or feeding apparatus to be used.

I.B. *History.* The first edition of AWWA B502 was approved as tentative Jan. 23, 1966. It was approved as a standard on June 1, 1967, and published as AWWA B502-67. It was subsequently revised and published as AWWA B502-78, AWWA B502-83, and AWWA B502-88. This edition was prepared by the AWWA Standards Committee on Scale and Corrosion-Control Chemicals and was approved by the AWWA Board of Directors on June 19, 1994.

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 all direct and indirect drinking water additives. Other members of the original consortium included the American Water Works Association Research Foundation (AWWARF) and the Conference of State Health and Environmental Managers (COSHEM). The American Water Works Association (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 two standards developed under the direction of NSF, ANSI†/NSF‡ 60, Drinking Water Treatment Chemicals—Health Effects, and ANSI/NSF 61, Drinking Water System Components—Health Effects.

Various certification organizations may be involved in certifying products in accordance with ANSI/NSF 60 (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.

*Persons in Canada, Mexico, and non-North American countries should contact the appropriate authority having jurisdiction.

†American National Standards Institute, 11 W. 42nd St., New York, NY 10036.

‡NSF International, 3475 Plymouth Rd., Ann Arbor, MI 48106.