

American Water Works Association

ANSI/AWWA B503-94

(Revision of ANSI/AWWA B503-89)



AWWA STANDARD
FOR
SODIUM TRIPOLYPHOSPHATE



Addendum B503a-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 B503.

I. Introduction

I.A. *Background.* Sodium tripolyphosphate is a manufactured product obtained by combining a comparatively pure chemical — soda ash (Na_2CO_3) or caustic soda (NaOH) — with phosphoric acid (H_3PO_4). The resultant product is subjected to controlled conditions of heating to form a crystalline solid, which is subsequently ground and sized.

Sodium tripolyphosphate is a white, solid material, commercially available in granular or powder forms. A solution of 1 lb/gal (0.12 kg/L) has a specific gravity of approximately 1.10. Refer to material safety data sheets (MSDS) available from the supplier or manufacturer for additional information.

I.B. *History.* The first edition of AWWA B503 was developed by the AWWA Committee on Scale and Corrosion-Control Chemicals. It was first published in 1978. The second edition was published in 1984, and the third edition in 1989. The use of sodium tripolyphosphate by water utilities for control of scale and corrosion, as well as red-water treatment, necessitates that a standard be available for this product. 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.

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