



Designation: D 595 – 85 (Reapproved 1997)

Standard Specification for Tetrasodium Pyrophosphate (Anhydrous)¹

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1. Scope

1.1 This specification for tetrasodium pyrophosphate (anhydrous) covers material suitable for various washing, cleaning, and scouring processes, with soap or other detergents where a mildly alkaline material, with appreciable water softening properties, is desired.

1.2 This material may be hazardous if not properly managed.

1.3 Precautionary information for the safe use, storage, and disposal of this material should be preliminarily obtained from suppliers and others.

1.4 In case of personal accident with this material, apply appropriate first aid; telephone the nearest Poison Control Center for assistance, and get medical attention immediately.

2. Referenced Documents

2.1 *ASTM Standards:*

D 501 Test Methods of Sampling and Chemical Analysis of Alkaline Detergents²

3. Terminology

3.1 *Definitions of Terms Specific to This Standard:*

3.1.1 Tetrasodium pyrophosphate (anhydrous) shall be a white, uniform product in either granular, powdered, or flake form, as specified by the purchaser.

4. Ordering Information

4.1 Tetrasodium pyrophosphate (anhydrous) shall be pur-

chased by net weight. When, however, due to hygroscopicity the tetrasodium pyrophosphate content is less than 97.5 %, a corresponding gain in weight of the package shall be expected, and the net weight shall be based on a product containing 97.5 % of tetrasodium pyrophosphate. The net weight of the material to be paid for shall be calculated as follows:

$$W = (R \times T)/97.5 \quad (1)$$

where:

W = weight of the material to be paid for,

R = net weight of material as received, and

T = total tetrasodium pyrophosphate calculated as percentage of $\text{Na}_4\text{P}_2\text{O}_7$.

4.2 In the event that the calculation under 4.1 results in a figure greater than 100 %, the seller waives the right to invoice the purchaser for any amount in excess of 100 %.

5. Chemical Composition

5.1 Tetrasodium pyrophosphate (anhydrous), as received, shall conform to the requirements as to chemical composition prescribed in Table 1.

6. Sampling and Analysis

6.1 The material shall be sampled and analyzed in accordance with Test Methods D 501.

7. Rejection

7.1 Material which has picked up sufficient water, as indicated by loss on ignition, to reduce the tetrasodium pyrophosphate content to 95 % or lower, may be rejected at the option of the purchaser.

¹ This specification is under the jurisdiction of ASTM Committee D-12 on Soaps and Other Detergents and is the direct responsibility of Subcommittee D12.14 on Specifications for Analysis of Inorganic Alkaline Detergents.

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² *Annual Book of ASTM Standards*, Vol 15.04.