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Standard Specification for Built Soap, Powdered¹

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¹ NOTE—Section 7 was added in April 1990.

1. Scope

1.1 This specification covers four types of built soap in powder form suitable for use at low, medium, or high temperatures, where the presence of alkaline salts is desirable.

2. Referenced Documents

2.1 ASTM Standards:

D 460 Test Methods of Sampling and Chemical Analysis of Soaps and Soap Products²

D 502 Test Method for Particle Size of Soaps and Other Detergents²

3. Ordering Information

3.1 Built soap is subject to a possible gain or loss of weight, depending on atmospheric or storage conditions, or both, or on packaging, as a result of fluctuations in the moisture content. Changes in the moisture content result in a corresponding change in the percentage of total solids or anhydrous soap content, or both.

3.2 The material shall be purchased by net weight, provided the matter volatile at 105°C is neither above nor below 13 %.

3.3 Deliveries containing more than 16 % of matter volatile at 105°C shall be rejected without further test.

3.4 On deliveries containing less than 16 % of matter volatile at 105°C, settlement shall be made on the basis of a product containing 13 % of moisture, that is, 0.87 lb of nonvolatile matter shall be considered 1 lb of soap.

3.5 When the material conforms to these specifications on

a calculated 16 % moisture and volatile matter basis, the net weight of the material to be paid for shall be calculated as follows:

$$W = (R \times (100 - L)) / 87$$

where:

W = net weight of the material to be paid for on 13 % moisture and volatile matter basis,

R = net weight of material, as received, and

L = percentage loss at 105°C.

4. General Requirements

4.1 Built soap shall be a high-grade product in powder form composed of soap and alkaline detergents. The soap shall be of uniform color, free from disagreeable odor, dirt, and other foreign matter. Built soap shall be soluble in water in the wash wheel without the formation of difficultly soluble aggregates.

5. Chemical Composition

5.1 Built soap shall conform to the requirements as to chemical composition prescribed in Table 1. The percentage of matter volatile at 105°C shall be calculated on the basis of the soap as received, but all other constituents shall be calculated on the basis of material containing 16 % of matter volatile at 105°C.

6. Methods of Sampling and Analysis

6.1 The material shall be sampled and analyzed in accordance with Test Methods D 460. The purchaser reserves the right to use any additional available information to ascertain whether the material conforms to this specification.

6.2 The sieve analysis shall be made in accordance with Test Method D 502.

7. Keyword

7.1 built soap

¹ This specification is under the jurisdiction of the ASTM Committee D-12 on Soaps and Other Detergents and is the direct responsibility of Subcommittee D12.22 on Specifications for Soaps and Synthetic Detergents.

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² Annual Book of ASTM Standards, Vol 15.04.