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AMERICAN SOCIETY FOR TESTING AND MATERIALS
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Standard Specification for Lotion Soap¹

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1. Scope

1.1 This specification covers viscous liquid lotion soap. Lotion soap is used for general skin cleansing in rest rooms and showers. Three types of lotion soap are covered as follows:

- 1.1.1 *Type A*—Synthetic detergent base.
- 1.1.2 *Type B*—Combination synthetic detergent and soap base.
- 1.1.3 *Type C*—Soap base.

2. Referenced Documents

2.1 ASTM Standards:

- D 93 Test Methods for Flash Point by Pensky-Martens Closed Cup Tester²
- D 460 Test Methods for Sampling and Chemical Analysis of Soaps and Soap Products³
- D 2196 Test Methods for Rheological Properties of Non-Newtonian Materials by Rotational (Brookfield) Viscometer⁴
- D 3142 Test Method for Specific Gravity or API Gravity of Liquid Asphalts by Hydrometer Method⁵
- D 3278 Test Methods for Flash Point of Liquids by Small Scale Closed-Cup Apparatus⁶
- E 70 Test Method for pH of Aqueous Solutions with the Glass Electrode⁷

2.2 Other Documents:⁸

Federal Food, Drug, and Cosmetic Act, Chapter VI and Code of Federal Regulations, Title 21, Subchapter G, Part 700.

3. Ordering Information

3.1 Lotion soap shall be purchased on the basis of net volume as received. The net contents shall be declared in

fluid ounces, gallons or cubic centimeters or liters, or both.

3.2 The standard unit of measure for price/value comparisons shall be the price per gallon.

4. General Requirements

4.1 Lotion soap may be transparent or opaque, white, colorless, or colored with an approved dye. The odor shall be nonoffensive and pleasant. Lotion soap shall be free of abrasives and organic solvents.

4.2 Lotion soaps shall clean common dirt-type soils from human skin. Lotion soaps shall be flowable, lather in most types of water, completely rinsed with water, and leave no significant residue on the skin. Lotion soaps may contain sequestering agents or antimicrobial ingredients, or both.

4.3 The ingredients in lotion soap formulation shall be safe for use on normal human skin when used in accordance with directions. The formulation shall not contain any prohibited ingredients as designated by the Food and Drug Administration and shall meet the requirements of Chapter VI of the Federal Food, Drug and Cosmetic Act with amendments and Code of Federal Regulations, Title 21, Subchapter G, Part 700.

4.4 Lotion soap shall have a shelf life of 1 year when stored between 50 and 90°F (10 and 32°C). If short periods of freezing or extremely warm temperatures will adversely affect the product during transportation or storage, the packaging of the lotion soap shall be marked with the specific conditions which must be avoided.

4.5 Lotion soap shall have sufficient flow characteristics to effectively dispense from commercial lotion dispensers that are recommended for lotion soap dispensing. The lotion soap shall be tested in the purchased dispenser/valve system to verify that the dispenser/valve system shall not corrode and that the lotion soap will be dispensed properly.

5. Physical Requirements

5.1 Types A, B, and C shall conform to the physical requirements given in Table 1.

6. Method of Sampling and Testing

6.1 Lotion soap shall be sampled and prepared in accordance with Test Methods D 460, Section 5. The purchaser shall have the right to use any validated or accepted methods and information to ascertain whether the product conforms to this specification.

¹ This specification is under the jurisdiction of ASTM Committee D-12 on Soaps and Other Detergents and is the direct responsibility of Subcommittee D 12.22 on Specifications for Soaps and Synthetic Detergents.

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² Annual Book of ASTM Standards, Vol 05.01.

³ Annual Book of ASTM Standards, Vol 15.04.

⁴ Annual Book of ASTM Standards, Vol 06.01.

⁵ Annual Book of ASTM Standards, Vol 04.03.

⁶ Annual Book of ASTM Standards, Vol 06.01.

⁷ Annual Book of ASTM Standards, Vol 15.05.

⁸ Available from Superintendent of Documents, U.S. Government Printing Office, Washington, DC. 20402.

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TABLE 1 Physical Requirements

Properties	Requirements		Determination
	min	max	
Viscosity, 70°F (21°C), cp	500	15 000	Brookfield viscometer, Test Method D 2196
Specific gravity, 60°F (16°C)	0.95	1.05	Hydrometer, Test Method D 3142
Flash point, °F (°C)	200 (93°C)	none	Pensky-Martens, Method D 93, or Setaflash, Test Method D 3278
pH, 5 % solution (distilled water)	4	10	pH meter, Test Method E 70
Shelf life (years)	1	none	room temperature storage

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