



Designation: D1570 – 95 (Reapproved 2023)

Standard Test Methods for Sampling and Chemical Analysis of Fatty Alkyl Sulfates¹

This standard is issued under the fixed designation D1570; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 These test methods cover the sampling and chemical analysis of paste, powder, or liquid detergent fatty alkyl sulfates.

1.2 The procedures for sampling and analysis appear in the following order:

	Sections
Sampling:	
Powders and Flakes Packed in Cans or Cartons	4
Powders and Flakes in Bulk	5
Liquids	6
Pastes	7
Preparation of Sample	8
Moisture by the Distillation Test Method	11 – 14
pH	15
Alkalinity	16 – 19
Alcohol-Soluble Matter	20 – 22
Alcohol-Insoluble Matter	23 and 24
Unsulfated Material	25 – 28
Combined Alcohols	29 – 32
Ester SO ₃ :	
Method A. Titration Test Method	36 and 37

	Sections
Ester SO ₃ :	
Method B. Gravimetric Test Method	38 and 39
Sodium Sulfate	40 – 43
Chlorides Calculated as Sodium Chloride (NaCl)	44 – 47

1.3 The values stated in either inch-pound or SI units are to be regarded separately as the standard. The values given in parentheses are for information only.

1.4 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety, health, and environmental practices and determine the applicability of regulatory limitations prior to use.* Material Safety Data Sheets are available for reagents and materials. Review them for hazards prior to usage.

1.5 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

2. Referenced Documents

2.1 ASTM Standards:²

[D216 Method for Distillation of Natural Gasoline](#)

[D1172 Guide for pH of Aqueous Solutions of Soaps and Detergents](#)

[D1193 Specification for Reagent Water](#)

¹ These test methods are under the jurisdiction of ASTM Committee D12 on Soaps and Other Detergents and are the direct responsibility of Subcommittee D12.12 on Analysis and Specifications of Soaps, Synthetics, Detergents and their Components.

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² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.