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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 11989-2020

**Surface active agents - Test methods of technical sodium
alkylarylsulphonates (excluding benzene derivatives)**

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2005 (see A.2.7, etc.);

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009.

This standard replaces GB/T 11989-2008 "Determination of the content of anionic surfactants dissolved in petroleum ether",

Compared with GB/T 11989-2008, the main technical changes are as follows.

- Modified the standard name;
- Modified the volume and temperature of the water required to dissolve the test parts (see A.4.2.1, 6.2.1 of the.2008 edition);
- Modify the solution required for phase separation (see A.4.2.2, 6.2.1 of the.2008 edition);
- Modified the sequence of adjusting the alkalinity (see A.4.2.2, 6.2.2 of the.2008 edition);
- Modified the solution required for demulsification (see A.4.2.3, 6.2.2 of the.2008 edition);
- Removed the extraction operation with plug measuring cylinder and siphon (see 6.2.3 of the.2008 edition)
- Modified the rest time of the ether phase after extraction (see A.4.2.5, 6.2.4 of the.2008 edition);
- Increased alcohol and water phase processing procedures for subsequent operations (see A.4.2.6);
- Modified the description of the petroleum ether phase wash end point (see A.4.2.7, 6.2.4 of the.2008 edition).

This standard uses a redrafting method to modify the use of ISO 1104. 1977 "surfactant industrial sodium alkyl aryl sulfonate (excluding benzene derivative

Biological) analysis method.

Compared with ISO 1104. 1977, the structure adjustment of this standard is as follows.

- Chapter 1 corresponds to ISO 1104. 1977 Chapter 1, Chapter 2;
- Chapter 2 corresponds to Chapter 3 of ISO 1104. 1977;
- Added Chapter 3 "Terms and Definitions";
- Deleted Chapter 4 and Chapter 5 of ISO 1104. 1977;
- Chapter 4 corresponds to 6.1 of ISO 1104. 1977;
- Chapter 5 corresponds to 6.2 of ISO 1104. 1977;
- Chapter 6 corresponds to 6.3 of ISO 1104. 1977;
- Chapter 7 corresponds to 6.4 of ISO 1104. 1977, and the test content is adjusted to Appendix A;
- Chapter 8 corresponds to 6.5 of ISO 1104. 1977, and the test content is adjusted to Appendix B;
- Chapter 9 corresponds to 6.6 of ISO 1104. 1977, and the test content is adjusted to Appendix D;
- Chapter 10 corresponds to 6.7 of ISO 1104. 1977;
- Chapter 11 corresponds to 6.8 of ISO 1104. 1977;
- Chapter 12 corresponds to Chapter 7 of ISO 1104. 1977;
- Appendix C corresponds to Appendix B of ISO 1104. 1977;
- Appendix E corresponds to Appendix A of ISO 1104. 1977.

The technical differences between this standard and ISO 1104. 1977 and the reasons are as follows.

--- With regard to normative quotation documents, this standard has been adjusted with technical differences to adapt to China's technical conditions and adjustments

The situation is reflected in Chapter 2 "Regulatory Reference Documents", with specific adjustments as follows.

- * Replace ISO 4314 with GB/T 6365 equivalent to international standards (see Chapter 6);
- * Replaced ISO 6844 with GB/T 6366 modified to adopt international standards (see Chapter 10);
- * Added references to GB/T 3050 (see Chapter 11), GB/T 6682 (see A.2, B.2, C.2, D.2) and QB/T 2739-

2005 (see A.2.7, etc.);

* Replace ISO 4316 with GB/T 6368 equivalent to international standards (see Chapter 4);

* Replaced ISO 4317 (see Chapter 5) with GB/T 11275 modified to adopt international standards;

* Removed ISO 607, ISO 894 and ISO 4318.

--- In order to facilitate the use of the standard, Chapter 3 "Terms and Definitions" has been added.

--- Because it was not used during the test, the requirements for sampling in Chapter 4 of ISO 1104. 1977 were deleted.

--- Due to duplication of content, the contents of Chapter 5 of ISO 1104. 1977 have been deleted.

--- In order to adapt to the use of China, the determination of water content has been modified (see Chapter 5).

--- In order to adapt to the use situation in China, the determination method of sodium chloride content was modified (see Chapter 11).

--- In order to adapt to China's usage habits and reagent specifications, the boiling range of petroleum ether was modified (see A.2.4).

--- In order to adapt to the actual situation in China, acetone has been added to the reagent list (see A.2.8).

--- According to China's operating habits, modified the type of flask (see A.3.1).

--- According to China's operating habits, the fractionation column was deleted (see A.3).

--- In order to adapt to the actual situation in China, the requirements of general laboratory utensils have been deleted (see A.3, B.3, C.3, D.3).

--- In order to meet the test requirements, the retention of petroleum ether phase was modified (see A.4.2.3).

--- In order to adapt to China's operating habits, the temperature of the water bath is specified (see B.4.2.4).

--- In order to adapt to the actual situation in China, the color change of the titration end point is specified (see D.4.2).

This standard also made the following editorial changes.

--- Modified the standard name;

--- Incorporate Chapter 1 of ISO 1104. 1977 and Chapter 2 of Chapter 1 of the cost

standard;

--- The introduction in the determination of petroleum ether extractables is changed to note (see A.1);

--- Modify 2-propanol to isopropanol (see A.2.2 and B.2.3);

--- Deleted the supplementary explanation of the last sentence in A.4.2.3 of ISO 1104. 1977;

--- The removal process of the alcohol phase layer solution has been simplified (see C.4.2.4);

--- Modified the expression of the requirements of the two weighing results changes (see A.4.2.7);

--- Deleted the note in B.6 of ISO 1104. 1977.

This standard was proposed by the China National Light Industry Council.

This standard is under the jurisdiction of the National Technical Committee for Standardization of Surfactants and Detergents (SAC/TC272).

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1 Scope

This standard specifies the pH, water content, free base or free acid, petroleum ether extractables, and alkylaryl of industrial sodium alkylarylsulfonates

Test methods for indicators such as sodium sulfonate, sodium sulfite, sodium sulfate, and sodium chloride.

This standard applies to industrial sodium alkyl aryl sulfonates in the form of pastes or powders (excluding other products not related to preparation).

This standard does not apply to sodium alkylbenzene sulfonate and liquid products.

2 Normative references

The following documents are essential for the application of this document. For dated references, only the dated version applies to this article