

ICS 71.100.40

QB

**LIGHT INDUSTRY STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

QB/T 2485-2023

**Toilet soap
(English Translation)**

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Foreword

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1 Scope

This document specifies the requirements for soaps; describes the corresponding test methods; specifies the inspection rules, marking, packaging, transportation, storage and shelf life; provides classifications for technical provisions.

This document is applicable to the production, inspection, sale of fatty acid salt soaps produced by milling or other processes, as well as solids made of fatty acid salts with additional functional agents.

2 Normative references

The contents of the following documents constitute essential provisions of this document through normative references in the text. Among them, for referenced documents with dates, only the version corresponding to that date applies to this document; for referenced documents without dates, the latest version (including all amendments) applies to this document.

GB/T 6682 Water for analytical laboratory use - Specification and test methods

GB/T 13173 Surface active agents - Test methods for detergents

GB/T 24314 Beeswax

GB/T 36970 Instruction for use of consumer products - Labelling for detergents

QB/T 1913-2004 Transparent soaps

QB/T 2623.1 Test methods of soaps - Determination of free caustic alkali content in soaps

QB/T 2623.2 Test methods of soaps - Determination of total free alkali content in soaps

QB/T 2623.3 Test methods of soaps - Determination of total alkali content and total fatty matter content in soaps

QB/T 2623.4 Test methods of soaps - Determination of moisture and volatile matter content in soaps - Oven method

QB/T 2623.6 Test methods of soaps - Determination of chloride content in soaps

QB/T 2623.8 Test methods of soaps - Determination of phosphate content in soaps

QB/T 2623.9 Test methods of soaps - Determination of total effective matter content in soaps

QB/T 2739 Preparations of standard volumetric solutions of general test methods for washing products

QB/T 2951 Inspecting rules for detergent products

QB/T 2952 Requirements for detergent marks and packaging

JF 1070.1 Rules of metrological testing for net quantity of soap products in prepackages with fixed content

3 Terms and definitions

There are no terms and definitions that need to be defined in this document.

4 Classification and marking

Products are divided into the following categories according to their ingredients:

- Soap type (indicated by type I): Products containing only fatty acid salts and additives. Marked as "QB/T 2485 type I".
- Compound type (indicated by type II): Products containing fatty acid salts and/or other surfactants, functional additives, additives. Marked as "QB/T 2485 type II".

5.1.1 Soap appearance

It shall be uniform in color, without obvious impurities and stains, except for products with special appearance requirements (such as colored patterns, colored particles, etc.).

5.1.2 Odor

Shall have a stable aroma, without unpleasant odors such as rancid oil.

5.2 Physical and chemical indicators

Shall comply with the requirements of Table 1.

Determine according to QB/T 2623.9; the reported result is calculated according to formula (2).

The arithmetic mean of the results of 2 parallel determinations is expressed to the integer as the determination result.

6.7 Moisture and volatile matter

Determine according to QB/T 2623.4.

The reported result of moisture and volatile matter, Y , is expressed in mass fraction and calculated according to formula (3):

Where:

Y - Reported result of moisture and volatile matter, expressed in percentage (%);

y - Conversion factor;

γ_1 - Actually measured result of moisture and volatile matter, expressed in percentage (%).

The arithmetic mean of the results of 2 parallel determinations is expressed to the integer as the determination result.

6.8 Total free alkali

Determine according to QB/T 2623.2.

If the ethanol-soluble substance does not make the phenolphthalein indicator solution appear pink, it is considered that the total free alkali in the ethanol-soluble substance has not been detected; the titration operation can be stopped. If the color of the colored soap interferes with the endpoint of the phenolphthalein indicator solution, thymol blue indicator solution can be used to indicate the endpoint of the titration.

The reported results are calculated according to formula (2).

The arithmetic mean of the results of 2 parallel determinations is expressed to 2 decimal places as the determination result.

6.9 Free caustic soda

Determine according to QB/T 2623.1.

If the ethanol solution does not make the phenolphthalein indicator solution appear pink, it is considered that the free caustic soda in the ethanol solution is not detected and the titration operation can be stopped. If the color of the colored soap interferes with the endpoint of the phenolphthalein indicator solution, thymol blue indicator solution can be used to indicate the endpoint of the titration.

The reported results are calculated according to formula (2).

The arithmetic mean of the results of 2 parallel determinations is expressed to 2 decimal places as the determination result.

6.10 Chloride

Determine according to QB/T 2623.6.

The reported results are calculated according to formula (2).

The arithmetic mean of the results of 2 parallel determinations shall be expressed to one decimal place as the determination result.

6.11 Total phosphorus pentoxide

Determine according to QB/T 2623.8 and filter if necessary.

Report the result according to formula (2).

The arithmetic mean of the results of 2 parallel determinations shall be expressed to one decimal place as the determination result.

6.12 Transparency

After constant temperature at $(25 \pm 2) ^\circ\text{C}$ for 24 hours, determine according to Appendix A of QB/T 1913-2004.

6.13 Net content

According to JJF 1070.1.

7 Inspection rules

The inspection rules shall be implemented in accordance with QB/T 2951.

Dry sodium soap or total effective matter shall be determined according to the product type indicated on the package; when the product type is not indicated on the package, it shall be