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CCS G72



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

GB/T 16497-2007

Replacing GB/T 16497-1996

**Surface active agents - Determination of storage stability of
water-in-oil emulsion**

表面活性剂 油包水乳液贮藏稳定性的测定

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Foreword

This standard while lieu consolidated GB/T 16497-1996 "surfactant-oil-water emulsion stability Part

1 Test Method Score. water in oil emulsion storage stability was measured oven method "and GB/T 16498-1996" water emulsion stability of surfactant-oil Test methods - Part 2. Determination of storage stability of water in oil emulsion - Low to ambient temperature cycling method. " This standard and GB/T 16497-1996 and GB/T 16498-1996 compared, the main differences are as follows:

--- Name specification standard "measurement water emulsion storage stability of the surfactant-oil."

--- Merge two national technical standards relevant sections of the same content. The standard proposed by China Petroleum and Chemical Industry Association. This standard is under the jurisdiction of Chemical Industry Standardization Technical Committee surfactant. This standard was drafted. Shanghai Dyestuffs Research Institute Co., Ltd. Drafters of this standard. Xusu Mei, is Qi Gu. This standard was first published in 1996. Surfactant Determination of water in oil emulsion storage stability

1 Scope

GB/T 16497-2007 is the Chinese national standard on surface active agents - determination of storage stability of water-in-oil emulsion, in the field of chemical technology. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 13 August 2007 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 February 2008. Classification: ICS 71.100.40, CCS G72. This page is published from the official record of the standard held by the Chinese standards administration: the

identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This standard specifies the surfactant-oil emulsion at different temperature changes, emulsion stability measurement method. This standard applies to the surfactant-oil emulsion at a constant temperature, and raised to $21\text{ }^{\circ}\text{C} \pm 3\text{ }^{\circ}\text{C}$ to $-18\text{ }^{\circ}\text{C} \pm$ at room temperature $1.5\text{ }^{\circ}\text{C}$ room temperature cycling, its use and determination of storage stability.

2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, all subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, whether under this standard to encourage the parties to reach an agreement and research You can use the latest versions of these documents. For undated reference documents, the latest versions apply to this standard. Determination of

GB/T 11275-2007 surfactant water content

3 Sampling

In order to ensure uniformity of the sample, pipetting the required amount in the previous test, the sample must be thoroughly mixed. 1L or less capacity for 1L, You can manually vigorous agitation or mechanical mixing 3min ~ 5min. For larger containers, stirring time may be extended to Ensure sample homogeneity.

4 Instruments and equipment

4.1 thermostatic oven, temperature fluctuation range is less than equal to the difference between the oven temperature and the room temperature of $\pm 1\%$;

4.2 graduated cylinder, 100mL stoppered glass cylinder, sub-scale of 1mL, cork with venting slots;

4.3 pipettes, 10mL;

4.4 bottles, about 30mL;

4.5 Refrigerator. Can temperature control in the refrigerator or freezer of $-18\text{ }^{\circ}\text{C} \pm 1.5\text{ }^{\circ}\text{C}$.

5 Measurement method

5.1 oven method Method summary. The 100mL samples were transferred to a graduated cylinder, the cylinder placed in $85\text{ }^{\circ}\text{C}$ constant temperature oven with a blast of 48h or 96h, and then Determination of the amount of sample is separated from oil and water. Further,

the upper and lower samples specified moisture content level may be obtained separately.

5.1.1 Method A. 48h Test 5.1.1.1 48h test procedure The 100mL samples were transferred to a graduated cylinder, covered with cork. The cylinder is placed in a thermostat at $85\text{ }^{\circ}\text{C} \pm 1\text{ }^{\circ}\text{C}$ constant temperature oven 48h. the amount Tube placed in the middle of the oven, from the bottom of the oven at least 75mm, in order to ensure temperature uniformity. The cylinder is removed from the oven and allowed to stand at room temperature for 1h, observe and record the volume of separating oil and water. And the pipette tip accurate Graduated cylinder placed at 80mL, 10mL sample was slowly pipetted into glass vials, as an upper layer sample; then placed accurately pipette tips 15mL graduated cylinder at the slow shift of 10mL sample into a glass bottle, as a lower layer sample.

Note 1. When several simultaneous determination of the cylinder should be placed to avoid the lack of convection caused by the temperature difference between the oven. And determining the number of samples should be limit.

Note 2. If the amount of water separation equals or exceeds 10% in volume, the lower the moisture content of the sample was selected to do the steps.