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

GB/T 6324.2-2004

**Test method of organic chemical products -- Part 2:
Determination of dry residue after evaporation on a water bath
for volatile organic liquids
(English Translation)**

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Foreword

GB/T 6324 Test method of organic chemical products consists of six parts.

- Part 1. Water miscibility test of liquid organic chemical products;
- Part 2. Determination of dry residue after evaporation on a water bath for volatile organic liquids;
- Part 3. Determination of permanganate-reducing substances;
- Part 4. Determination of trace sulfur in organic liquid products - Microcoulometric method;
- Part 5. Determination of trace quantities of carbonyl compounds in organic chemicals;
- Part 6. Determination of color for liquids - Tristimulus colorimetry.

This Part is the second part of GB/T 6324.

This Part was redrafted on the basis of adopting ISO 759.1981 Volatile organic liquids for industrial use--Determination of dry residue after evaporation on water bath--General method (English version). Annex A lists the comparison on clause number between this Part and ISO 759.1981.

Considering national conditions of China, this Part made some modifications when adopting ISO 759.1981. The main difference is that it deleted Clause 8

Test report of ISO 759.1981.

This Part replaces GB/T 6324.2-1986 Volatile organic liquids--Determination of dry residue after evaporation on a water bath--General method.

Compared with GB/T 6324.2-1986, the main changes are as follows.

- added the content of "warning" and clause of sampling (see Warning of this Edition and Clause 5);

- modified "This Part is applicable to volatile organic liquid of which the evaporation residue is not less than 5 mg/kg" to "This Part is applicable to volatile organic liquid of which the amount of evaporation residue is greater than or equal to 10 mg/kg [mass fraction is 0.001%]" (Clause 1 of Edition 1986, Clause 1 of this Edition);

- modified "Heat the evaporation pan in the oven for 1 h and take it out. Place it in a dryer and weigh after cooling for 45 min" to "Put the evaporation pan in the oven and heat it for 2 h. Place it in a dryer and cool to ambient temperature. Weigh it." (Clause 4 of Edition 1986, Clause 6 of this Edition);

- modified "Heat the evaporation pan with residue in the oven for 2 h. Take it out and place it in a dryer for 45 min cooling. Weigh it and put it into the oven for 1 h heating. Place it into the dryer and cool it for 45 min. Weigh it to constant mass" to "Heat the evaporation pan with residue in the oven for 2 h. Take it out and place it in a dryer and cool to ambient temperature. Weigh it. Repeat the above procedures until the mass is constant" (Clause

4 of Edition 1986, Clause 6 of this Edition);

- modified "the sample density used by result calculation at 20°C" to "the density at test temperature" (Clause 5 of Edition 1986, Clause 7 of this Edition);

- added the expression method of milligrams per liter (mg/L), milligrams per kilogram (mg/kg), milligrams per 100 milliliters in the calculation of results

(see Clause 7).

Annex A of this Part is informative.

This Part was proposed by China Petroleum and Chemical Industry Association.

This Part shall be under the jurisdiction of Subcommittee on Organic, National Technical Committee on Chemical of Standardization Administration of China (SAC/TC 63 / SC 2).

The drafting organization of this Part. Beijing Research Institute of Chemical Industry, China Petroleum & Chemical Corporation.

Main drafter of this Part. Hu Yanfeng.

This Part was issued in April 1986 for the first time.

Test method of organic chemical products - Part 2.

Determination of dry residue after evaporation on a water bath for volatile organic liquids

WARNING Personnel who use this Standard shall have practical experience in formal laboratory work. This Standard does not address all possible safety issues. It is the user's responsibility to take appropriate safety and health measures and to ensure compliance with the relevant national regulations.

It should be noted that many products are volatile, flammable, reactive or have toxic potential hazards; some solvents and chemical intermediates such as ethers, unsaturated compounds in the storage may form peroxide; the presence of peroxide can cause a strong explosion hazard. Therefore, in the application of this test method, it shall carefully consider the preventive measures to eliminate these potential hazards.

1 Scope

This Part of GB/T 3903 specifies a test method for determining volatile organic chemical liquid products evaporated on a water bath after the dry residue.

This Part is applicable to volatile organic liquid of which the amount of

evaporation residue is greater than or equal to 10 mg/kg [mass fraction is 0.001%]. If the amount of evaporation residue is less than 10 mg/kg [mass fraction is 0.001%], it shall increase the sampling amount appropriately.

2 Normative references

The following standards contain the provisions which, through reference in this Part, constitute the provisions of this Part. For dated references, subsequent amendments (excluding corrections) or revisions do not apply to this Part.

However, the parties who enter into agreement based on this Part are encouraged to investigate whether the latest versions of these documents are applicable. For undated reference documents, the latest versions apply to this Part.

GB/T 4472 Determination of density and relative density for chemical products

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