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

GB/T 18423-2013

Replacing GB/T 18423-2001

**Rubber and plastics hoses and tubing -- Determination of
transmission of liquids through hose and tubing walls**

橡胶和塑料软管及非增强软管 液体壁透性测定

(English Translation)

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Foreword

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

This standard replaces GB/T 18423-2001 "Rubber and plastics hoses and hose non-reinforced wall liquid permeability measurement", and GB/T 18423-2001 main technical changes compared as follows.

--- The "free length" of the sample to the sample "free length and tolerance" (see 5.2,2001 version 5.2);

--- Test Method A "master valve", "master valve" unified "master valve" (see Chapter 5, Chapter 5 of the 2001 edition);

--- The volume of the unit by the cm³ to mL (see 5.6.2,2001 version 5.6.2);

--- Test Method B increase. if necessary, can be supplemented during the test liquid (see 6.4.4), to extend the test time and the use of blank test Amendments (see 6.4.10).

This standard uses the translation method identical with ISO 8308:2006 "Rubber and plastics hoses and hose non-reinforced wall liquid permeability determination."

Correspondence between the consistency of the standards of international documents and normative references of the following documents.

--- GB/T 2941-2006 rubber physical test method for preparing and conditioning General procedures (ISO 23529:2004, IDT)

--- GB/T 9573-2003 Rubber and plastics hose and hose assemblies size measurement method (ISO 4671:1999, IDT)

--- GB/T 12804-2011 laboratory glassware cylinder (ISO 4788:2005, NEQ) this standard made the following editorial changes.

--- The pressure units bar (bar) instead of the legal units of measurement kPa (kPa).

The standard proposed by China Petroleum and Chemical Industry Association.

This standard by the National Rubber and rubber products hose Standardization Technical Committee Technical Committee (SAC/TC35/SC1) centralized.

1 Scope

This standard specifies two methods for measuring the performance of the liquid through the tube wall reinforced hose hoses and Africa, these two methods are suitable for rubber and Rubber hoses and hose non-reinforced determination were as follows.

A --- The method is suitable for all sizes and structures of the hose, the actual comparison test under a simulated working conditions;

Method B --- suitable for hose inside diameter of not more than 16mm and non-reinforced hose.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document.

ISO 4671 Rubber and plastics hoses and hose assemblies size measurement method (Rubberandplasticshosesandhoseassemblies-Methodsofmeasurementofdimensionsofhosesandlengthofhoseassemblies) ISO 4788 laboratory glassware cylinder (Laboratoryglassware-Graduatedmeasuringcylinders) ISO 23529 rubber physical test method for preparing and conditioning General Procedure (Rubber-Generalproceduresforpreparingandconditioningtestpiecesforphysicaltestmethods) Principle 3

3.1 Method A

In this method, the assembly is mounted in a test carried out equipment, the test equipment can be filled with a volatile liquid and measurement Filling volume means. The system pressure and the volume change measured once every 24h until constant volume change over time, i.e. equilibrium is reached status. Evaporation rate test results for this steady-state, non-reinforced hose to hose surface area per unit of body fluid loss per hour Product representation.

3.2 Method B

This method uses a non-pressure vessel, a section of hose or non-reinforcing end of the hose connected thereto, and the other end of the hose or reinforced hose Stoppered. The vessel was part of the test liquid filled and sealed. In the beginning of the test weighing the

assembly, said in every 24h thereafter 8d Amount of time. The test results reinforced hose or hose either 24h during the largest surface area per unit mass of liquid loss represented.

Note: In this method, penetration and evaporation loss of liquid measure its value, and by stirring a mixture of fuel per day, so that the liquid component is reduced permselective at the lowest limit.

4 Test liquid

Test liquids shall comply with the appropriate product standards.