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

GB/T 9572-2013

Replacing GB/T 9572-2001

**Rubber and plastics hoses and hose assemblies --
Determination of electrical resistance and conductivity**

橡胶和塑料软管及软管组合件 电阻和导电性的测定

(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 9572-2001 "Rubber and plastics hoses and hose assemblies - Determination of electrical resistance", and GB/T 9572-Compared to 2001, the main technical changes are as follows.

--- Normative references have changed (see Chapter 2, Chapter 2, 2001 edition);

--- Increased terms and definitions (see Chapter 3);

--- Increased determination conductive, antistatic and non-conductive hoses resistance device (see 4.2.1.3,4.2.1.4);

--- Adds special electrodes and the contact pads measuring conductive, antistatic and non-conductive hoses resistance (see 4.2.2.2);

--- Added Figure 1 (see 4.2.2.2);

--- Increased hose and hose assemblies - Determination of resistance of the pipe wall (see 4.9);

--- Increasing the on-site tests and routine testing and product acceptance test carried out in the workshop of the provisions (see 4.2.2.1,4.4,4.5, 4.6.1,4.7.1.2);

- Increased Figs. 3, 4 and 5 (see 4.9.3,7.5);
- Increase the hose assemblies for electrical continuity measuring equipment hose couplings and metal wire communication (see 5.2);
- Increase the hose assemblies with a metal hose connector contact (or conducting electrostatic discharge static electricity) inner liner or hose assembly (antistatic or discharge any static electricity) Determination of the overcoat layer resistance (see Chapter 7);
- Modify the content of the test report (see Chapter 8, Chapter 6 of the 2001 edition);
- Added Appendix A recommended range of terms and conductivity and resistance (see Appendix A).

This standard uses the translation method identical with ISO 8031:2009 "Rubber and plastic hoses and hose assemblies - Determination of electrical conductivity and resistance." this standard made the following editorial changes.

- ISO 23529 in the normative references cited, but not mentioned in the text. This standard adds "4.4 Press ISO 23529 ".

The standard international normative documents referenced in the correspondence between the consistency of the following documents.

- GB/T 11210-1989 Rubber, vulcanized - Antistatic and conductive products - Determination of electrical resistance (ISO 2878. 1987, eqv);
- GB/T 7528-2011 Rubber and plastic hoses and hose assemblies terminology (ISO 8330:2007, IDT);
- GB/T 2941-2006 rubber physical test method for preparing and conditioning General procedures (ISO 23529:2004, IDT).

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

The standard provides for determination of rubber and plastic hoses, non-reinforced hose electrical performance test methods and assembly.

This standard applies to the determination between the conductive, antistatic and non-conductive hose, and their assembly fittings electrical continuity and electrical Intermittent.

Note: All test methods described in this standard may also apply to plastic 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 2878 Rubber - Antistatic and conductive products resistance measurement (Rubber-Antistaticandconductiveproducts-Determinationofelectricalresistance) ISO 8330 Rubber and plastics hoses and hose assemblies term (Rubberandplasticshosesandhose assemblies-Vocabulary) ISO 23529 rubber physical test method for preparing and conditioning the general procedure (Rubber-Generalproceduresfor preparingandconditioningtestpiecesforphysicaltestmethods)

3 Terms and Definitions

Terms and definitions as defined in ISO 8330 apply to this document.

4.1 Overview

Rubber hoses may be having a conductive inner liner or outer conductive coating, or may be completely made of conductive plastic material. This test provides three Determination of the resistance and conductivity typed hose.

4.2 Device

The following equipment shall be used in accordance with the provisions of ISO 2878.

1) Structure Description see ISO 8330 and its appendices.

4.2.1 Test Instruments

4.2.1.1

In order to measure conductivity, antistatic and non-conductive electrical resistance of hoses 1), capable of measuring insulation resistance should preferably have a 500V rated straight Flow open-circuit voltage of a specific instrument, or the use of other instruments known comparable test results. Unless otherwise specified, the instrument should be sufficiently fine Density measurement resistor to ensure error within $\pm 10\%$. During the test, in order to prevent errors due to temperature effects generated in the sample