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

GB/T 39515.3-2020

**Agricultural and forestry machinery-Environmental
requirements for sprayers - Part 3: Sprayers for bush and tree
crops**

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Standardization Administration**

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Foreword

GB/T 39515 "Environmental Requirements for Agricultural and Forestry Machinery Sprayers" is divided into 4 parts:

---Part 1: General requirements;

---Part 2: Horizontal boom sprayer;

---Part 3: Sprayers for shrubs and trees crops;

---Part 4: Stationary and semi-mobile sprayers:

This part is Part 3 of GB/T 39515:

This section was drafted in accordance with the rules given in GB/T 1:1-2009:

The translation method used in this part is equivalent to ISO 16119-3:2013 Environmental Requirements for Agricultural and Forestry Machinery Sprayers Part 3: Shrubs and

Sprayer for arbor crops:

The Chinese documents that have a consistent correspondence with the international documents cited in this section are as follows:

---GB 10395:6-2006 Agricultural and forestry tractors and machinery safety technical requirements Part 6: Plant protection machinery (ISO 4254-6:1995, MOD)

---GB/T 10610-2009 Product Geometric Technical Specification (GPS) Surface structure profile method to evaluate the rules of surface structure

And method (ISO 4288:1996, IDT)

---GB/T 18675-2002 Determination of total residual liquid volume of agricultural sprayers for plant protection machinery (idt ISO 13440:1996)

---GB/T 18678-2002 Plant protection machinery, agricultural sprayer (apparatus), the rated capacity of the liquid tank and the diameter of the filling hole (eqv

ISO 9357:1990)

---GB/T 20084-2006 Plant protection mechanical sprayer connection thread (ISO 4102:1984, MOD)

---GB/T 20085-2006 Plant protection machinery vocabulary (ISO 5681:1992, MOD)

---GB/T 20183:1-2006 Plant protection machinery spray equipment Part 1: Sprayer nozzle test method

(ISO 5682-1:1996, IDT)

---GB/T 20183:2-2006 Plant protection machinery spraying equipment Part 2: Hydraulic sprayer test method

(ISO 5682-2:1997, IDT)

---GB/T 20183:3-2006 Plant protection machinery spray equipment Part 3: Agricultural hydraulic sprayer liquid application per hectare

Regulation system test method (ISO 5682-3:1996, IDT)

---GB/T 24683-2009 Plant protection machinery, test method of air blower for bush and tree crops

(ISO 9898:2000, IDT)

---GB/T 24684:1-2009 Plant protection machinery evaluation cleaning system test method part 1: sprayer machine

Internal cleaning (ISO 22368-1:2004, IDT)

---GB/T 24684:3-2009 Plant protection machinery evaluation cleaning system test method Part 3: The inside of the chemical tank

Cleaning (ISO 22368-3:2004, IDT)

---GB/T 32242:1-2015 Plant protection mechanical inhalation dosing device Part 1: Test method (ISO 21278-1:

2008, MOD)

---GB/T 32242:2-2015 Plant protection mechanical inhalation dosing device Part 2: General requirements and performance limits

(ISO 21278-2:2008,MOD)

This section has made the following editorial changes:

--- Use "MPa" conversion instead of "bar":

This part was proposed by China Machinery Industry Federation:

This part is under the jurisdiction of the National Agricultural Machinery Standardization Technical Committee (SAC/TC201):

Drafting organizations of this section: Taizhou Xinyi Agricultural Machinery Co., Ltd., Chinese Academy of Agricultural Mechanization Sciences, Shandong Huasheng Agricultural Pharmaceutical Machinery Co., Ltd:

Limited Liability Company, Zhejiang Osen Machinery Co., Ltd., Nanjing Agricultural Mechanization Research Institute of Ministry of Agriculture and Rural Affairs, Fujite Co., Ltd:

Introduction

The technical requirements of this part of GB/T 39515 are based on the test methods given in ISO 5682-2:1997: This standard is mainly used for liquids:

Power sprayer: For other types of sprayers, other test methods and/or test standards that may be required are part of GB/T 39515

Subject to future investigation/revision:

This part belongs to the Type C standard specified by ISO 12100:

This section points out the machinery-related hazards, dangerous states, dangerous events and their scope covered:

When the provisions of Type C standards are different from those of Type A or Type B standards as the basis, the provisions of Type C standards take precedence over those of other standards:

It is stipulated that the design and manufacture of machinery and tools shall follow the provisions of the Class C standard:

Environmental requirements for agricultural and forestry machinery sprayers

Part 3: Sprayer for shrub and tree crops

1 Scope

This part of GB/T 39515 specifies the use of sprayers for shrub and tree crops (see the definition in 3:1) and other similar crops:

Technical requirements and verification methods for minimizing the potential risk of environmental pollution during use (including misuse that can be foreseen by the manufacturer):

This section does not apply to shrub and tree crops with human-powered sprayers:

This part is used in conjunction with GB/T 39515:1 which specifies general requirements for

the design and performance of various sprayers: As specified in this section

The requirements are different from those specified in GB/T 39515:1, and sprayers that fall within the scope of this section have priority to follow the provisions of this section: this

The part does not contain safety aspects: For safety requirements, see ISO 4254-6:

This section does not apply to sprayers manufactured before the release date:

2 Normative references

The following documents are indispensable for the application of this document: For dated reference documents, only the dated version applies to this article

Pieces: For undated references, the latest version (including all amendments) applies to this document:

GB/T 39515:1-2020 Environmental requirements for agricultural and forestry machinery sprayers Part 1: General requirements (ISO 16119-1:2013,

IDT)

ISO 4102 Plant protection mechanical sprayer connection thread
(Equipment for crop protection-Sprayers-Connection threading)

ISO 4254-6:2009 Safety of Agricultural Machinery Part 6: Sprayers and Liquid Fertilizers
(Agricultural machinery-Safety-Part 6: Sprayers and liquid fertilizer distributors)

ISO 4288 Product Geometric Technical Specification (GPS) Surface structure profile method: Rules and methods for evaluating surface structure (Geometrical Product Specifications (GPS)-Surface texture: Profile method-Rules and procedures for the assessment of surface texture)

ISO 5681 Plant Protection Machinery Vocabulary (Equipment for crop protection-Vocabulary)

ISO 5682-1 Plant protection machinery spray equipment Part 1: Sprayer nozzle test method
(Equipment for crop protection-Spraying equipment-Part 1: Test methods for sprayer nozzles)

ISO 5682-2:1997 Plant protection machinery spraying equipment Part 2: Hydraulic sprayer test method (Equipment for crop protection-Spraying equipment-Part 2: Test methods for hydraulic sprayers)

ISO 5682-3:1996 Plant protection machinery spray equipment-Part 3: Agricultural hydraulic