

ICS 65.060.40

CCS B 91



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

GB/T 24684.2-2009

**Crop protection equipment -- Test methods for the evaluation of
cleaning systems -- Part 2: External cleaning of sprayers**

植物保护机械 评价清洗系统的试验方法 第2部分：喷雾机的外部清洗

(English Translation)

Issued on: November 30, 2009

Implemented on: April 1, 2010

Issued by: Standardization Administration of China

Table of Contents

- Foreword
- Introduction
- 1 Scope
- 2 Terms and definitions
- 3 Test solution and conditions
 - 3.1 General requirements
 - 3.2 Test solution
 - 3.3 Test conditions

Foreword

GB/T 24684 "Standard Test Method for Evaluation of plant protection machinery and washing system" is divided into the following three parts.

- Part 1. Internal sprayer machine cleaning;
- Part 2. External cleaning of the sprayer;
- Part 3. Internal tank cleaning.

This section is GB/T Part of 224,684.

This section identical with ISO 22368-2:2004 "Test methods for evaluation of plant protection machinery cleaning system - Part 2. Sprayer External cleansing "(in English).

This section is equivalent translation ISO 22368-2:2004.

For ease of use, this section made the following editorial changes.

- "ISO 22368-2:2004 this part" to "this Part";
- Deleted international standards foreword;
- With a decimal point "." As an alternative to the decimal point "." Appendix A of this section is normative appendix, Appendix B, Appendix C is informative appendix.

This part is proposed by China Machinery Industry Federation.

This part of the National Standardization Technical Committee (SAC/TC201) Agricultural machinery centralized.

This section drafted by. Chinese Academy of Agricultural Mechanization Sciences, Ministry of Agriculture, Nanjing Institute of Agricultural Mechanization, Modern Agricultural

Equipment Technologies AG Limited.

Introduction

For the following reasons, plant protection sprayer cleaning becomes more and more important.

- In order to avoid contamination of the environment and the operator;
- Pesticide that may occur because of an accidental discharge causing crop injury, triggering fears of increased pesticide residues, or Caused by pesticides mixing several mutually exclusive.

In addition, the relevant industrial sector may need to provide development guidelines washing system to assess the level of technological development and future technology base.

GB/T 24684.1 and GB/T 24684.2 provisions of the relevant test methods and internal and external cleaning sprayer, to provide users Evaluation of internal and external cleaning system as well as the overall performance of a method to determine the future technical performance basis. This series of standards for the spray organs Key components provides a separate chapter (see GB/T 24684.3).

This section evaluation of cleaning a particular part of the system provides test methods in detail the results obtained may be improved and perfected cleaning systems Provide evidence. This section seeks to provide one kind of standard test procedures in order to simulate normal operating conditions of the liquid sprayer contamination. root According to the test target, you can use two different test methods for any one or two ways. A test designed to develop or adjust the sprayer will External contamination is minimized by the sprayer; B test to compare different systems used to clean the sprayer, and for the future that might be raised to Required to examine the performance of the cleaning device.

GB/T 24684.2-2009/ISO 22368-2:2004 Plant protection machinery Test methods for the evaluation of cleaning systems Part 2. External cleaning of sprayers WARNING. Users should be familiar with this part of the routine laboratory practice. This section related to the use of all possible security not addressed Wide issues. Users should make their own provisions appropriate safety and health practices and to ensure compliance with relevant national safety and environmental provisions.

1 Scope

This section GB/T 24684 specifies the evaluation of the cleaning system installed on the plant protection sprayer for cleaning the outer surfaces of the sprayer deposition Two test methods for system performance. The trial is designed to provide information on pollution sprayer to sprayer designer, and with an external cleared Wash the press concerning

various accessories or adjusting means is compared (test A), and provides a method (Test B) as measured in the cleaning system performance.

This section applies to plant protection and spraying liquid fertilizer suspended, towed and self-propelled agricultural sprayers.

2 Terms and definitions

The following terms and definitions apply to this section.

Mounted on a sprayer for cleaning the outer surface of the part of the sprayer.

3.1 General requirements

3.2 test solution should be prescribed and tested under the conditions specified in 3.3. If you can demonstrate the same performance, You can use other liquid tracer test. To this end, the measurement accuracy should be at least the original tank concentration of 0.01%.

NOTE: To test A and test B are each provided for a test solution. For test A, can be easily cleaned using a deposition soluble dye; for test B, it requires the use of more viscous test liquid, in order to more clearly distinguish the differences between different cleaning device performance.

3.2.1 Test A

It should be used at a concentration of 0.1% 85% E102 tartrazine yellow solution as the test solution.

3.2.2 Test B

Appendix A provision should be used at a concentration of 0.1% of basic copper chloride suspension as a test solution.

3.3 Test conditions

It should be tested under the following conditions.

Test solution temperature. 5 °C ~ 25 °C.

Ground conditions. no dust and leaves (such as grass).

Repetitive test when.

- Temperature fluctuation range of not more than 5 °C;
- Relative humidity range of variation less than 20%;
- Maximum wind speed. 5.0m/s (in a fixed position test area 2m height measurements).

GB/T 24684.2-2009/ISO 22368-2:2004