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

**GB 23554-2009**

Replacing GB/T 23554-2009

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**Ethephon soluble concentrate**

40%乙烯利水剂

**(English Translation)**

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### Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents" Drafting:

This document replaces GB/T 23554-2009 "40% Ethephon Aqueous Agent": Compared with GB/T 23554-2009, except for structural adjustment and compilation in addition to editorial changes, the main technical changes are as follows:

---Added specifications and indicators of etheric solution (see 4.2);

---Added 2-chloroethylphosphonate-2-chloroethyl ester mass fraction items and indicators (see 4.2);

--- Added ion chromatography method for determination of ethephon mass fraction (see 5.5.1);

---Added inspection rules (see Chapter 6);

---Increased the quality assurance period of etheric solution (see 7.2):

Please note that some content in this document may be subject to patents: The publisher of this document assumes no responsibility for identifying patents:

### 1 Scope

This document stipulates the technical requirements, inspection rules, acceptance and quality assurance period of etheric solution, as well as the signs, labels, packaging, storage this article describes a test method for etheric solutions:

This document applies to the quality control of etheric solution products:

**Note:** See Appendix A for other names, structural formulas and basic physical and chemical parameters of ethephon, 2-chloroethyl 2-chloroethylphosphonate (MEPHA) and 1,2-dichloroethane:

## 2 Normative reference documents

The contents of the following documents constitute essential provisions of this document through normative references in the text: Among them, the dated quotations for undated referenced documents, only the version corresponding to that date applies to this document; for undated referenced documents, the latest version (including all amendments) applies to this document:

GB/T 601 Preparation of chemical reagent standard titration solution GB/T 603 Preparation of preparations and products used in chemical reagent test methods GB/T 1601 Determination of pH value of pesticides GB/T 1604 Commercial Pesticide Acceptance Rules GB/T 1605-2001 Sampling methods for commercial pesticides GB 3796 General principles for pesticide packaging GB/T 8170-2008 Numerical rounding rules and representation and determination of limit values GB/T 19136-2021 Determination method of thermal storage stability of pesticides GB/T 19137-2003 Method for determination of low-temperature stability of pesticides GB/T 28137 Determination method of persistent foaming property of pesticides GB/T 32776-2016 Pesticide density determination method

## 3 Terms and definitions

There are no terms or definitions to be defined in this document:

## 4 Technical requirements

### 4.1

Appearance

Stable homogeneous liquid, no visible suspended matter and sedimentation:

### 4.2

Technical indicators Etheric solution should comply with the requirements of Table 1: