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

GB/T 34765-2024

Replacing GB/T 34765-2017

**Fertilizers and soil conditioners-Determination of fulvic acid
content and carbon coefficient**

肥料和土壤调理剂 黄腐酸含量及碳系数的测定方法

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Table of Contents

Foreword

1 Scope

2 Normative references

3 Terms and definitions

3.1 Fulvic acid

3.2 Mineral fulvic acid

3.3 Bio-fulvic acid

Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting is required.

This document replaces GB/T 34765-2017 "Determination of fulvic acid content from mineral sources".

In addition to structural adjustments and editorial changes, the main technical changes are as follows.

Changed the scope (see Chapter 1, Chapter 1 of the 2017 edition); - Added the terms and definitions of "mineral source fulvic acid" and "biomass fulvic acid" (see 3.2, 3.3); - Changed the sample preparation (see Chapter 7, 4.4.1 of the 2017 edition); - The determination method of fulvic acid content has been changed (see Chapter 8, Chapter 4 of the 2017 edition); - The determination method of chloride ion content has been changed (see 8.2.3, Appendix A of the 2017 edition); - Changed the calculation basis of the test data from fulvic carbon content to fulvic acid content (see Chapter 9, 2017 Edition) Chapter 5 of);

Changed the precision requirements (see Chapter 10, Chapter 6 of the 2017 edition); - Added "Test Report" (see Chapter 11). - Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents.

This document was proposed by the China Petroleum and Chemical Industry Federation.

This document is under the jurisdiction of the National Technical Committee for Standardization of Fertilizers and Soil Conditioners (SAC/TC 105).

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The previous versions of this document and the documents it replaces are as follows.

First published in 2017 as GB/T 34765-2017; - This is the first revision. - Fertilizers and soil conditioners Fulvic acid content and Method for determination of carbon coefficient

1 Scope

This document describes the determination method of fulvic acid content and carbon coefficient, including principle, test steps, test data processing, precision and test results. Inspection report.

This document is applicable to the determination of fulvic acid content and carbon coefficient in fertilizers and soil conditioners.

2 Normative references

GB/T 6274

GB/T 6679

GB/T 6680

GB/T 6682

GB/T 38072-2019

NY/T 887

3 Terms and definitions

The terms and definitions defined in GB/T 6274, GB/T 38072-2019 and the following apply to this document.

3.1 Fulvic acid

A group of humic substances with relatively small molecular weight, which can be dissolved in dilute alkaline solution, acid and water, and has aromatic and aliphatic. It is an amorphous organic weak acid mixture with various functional group structural characteristics, and its dilute solution is yellow or brownish yellow.

Note. According to the type of raw materials, it is divided into mineral source fulvic acid and biomass fulvic acid.

[Source. GB/T 38072-2019, 2.1.2, modified]

3.2 Mineral fulvic acid

Fulvic acid extracted from organic minerals such as weathered coal, lignite, peat and shale.

[Source. GB/T 38072-2019, 2.1.3]

3.3 Bio-fulvic acid

Biochemical Fulvic Acid Grain-based waste residue, plant straw, bagasse, sawdust, kitchen waste, and alcohol waste are fermented by microorganisms or chemically processed under high temperature and high pressure conditions.

Fulvic acid obtained by the reaction.

[Source. GB/T 38072-2019, 2.1.4]