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

GB/T 30893-2024

Haematococcus pluvialis powder

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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 30893-2014 "Haematococcus pluvialis powder". Compared with GB/T 30893-2014, except for the structural adjustment and compilation In addition to logical changes, the main technical changes are as follows: Deleted the relevant contents concerning food safety indicators and requirements (see 3.6, 4.7,

6.1 of the.2014 edition); - The provisions on production and processing conditions have been deleted (see

3.3 of the.2014 edition); - The test methods for total astaxanthin and all-trans astaxanthin content have been changed (see 5.2.2, 5.2.3, 4.3,

4.4 of the.2014 edition). - 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 Ministry of Agriculture and Rural Affairs of the People's Republic of China. This document is under the jurisdiction of the National Technical Committee on Aquatic Products Standardization (SAC/TC 156). This document was drafted by: Yellow Sea Fisheries Research Institute, Chinese Academy of Fishery Sciences, Yunnan Boxin Biotechnology Co., Ltd., Dalian Institute of Vocational University. The main drafters of this document are. Zhu Wenjia, Wang Lianzhu, Sun Weihong, Bai Guanyu, Guo Yingying, Li Na, Yao Lin, Hou Hongman, Jiang Yanhua, Li Lurong and Duan Jiangtao. The previous versions of this document and the documents it replaces are as follows: First published in.2014 as GB/T 30893-2014; - This is the first revision. - Haematococcus pluvialis powder

1 Scope

GB/T 30893-2024 is the Chinese standard for Haematococcus pluvialis powder, the dried microalga that is the principal natural source of astaxanthin. It is a high-value product with a

specific analytical problem: astaxanthin is the reason for buying it, it is unstable to light, heat and oxygen, and it is locked inside a thick cell wall that must be broken for the pigment to be either measurable or bioavailable, so the specification has to address the cell disruption as well as the assay. The standard sets the classification and the requirements: the sensory characteristics, the astaxanthin content and its form, the moisture, ash and protein, the particle size and the degree of cell wall breakage, the limits on heavy metals, pesticide residues and microbiological indicators, and the requirements on the cultivation and processing. It then gives the test methods, including the extraction and chromatographic determination of astaxanthin, the inspection rules and the labelling, packaging, transport and storage under the conditions the pigment requires. It takes effect on 1 April 2025.

This document specifies the requirements for raw materials, processing water, sensory, physical and chemical indicators, and net content of *Haematococcus pluvialis* powder, and describes the corresponding test. It specifies the inspection methods, inspection rules, labeling, packaging, transportation and storage. This document is applicable to the production of *Haematococcus pluvialis* algae and spores as raw materials through wall breaking, drying and other processes. Production, processing and sales of *Haematococcus pluvialis* powder.

2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document. For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies. in this document.

GB/T 191 Pictorial markings for packaging, storage and transportation

GB 5009.3 National Food Safety Standard Determination of Water Content in Food

GB 5009.4 National Food Safety Standard Determination of Ash Content in Food

GB 5009.5 National Food Safety Standard Determination of Protein in Food

GB 5749 Sanitary standard for drinking water

GB/T 6682 Specifications and test methods for water used in analytical laboratories

GB/T 30891 Sampling Specification for Aquatic Products

GB/T 36193 Terminology for Aquatic Product Processing

JJF 1070 Rules for the measurement and inspection of the net content of quantitatively

packaged goods SC/T 3035 General Rules for Packaging and Labeling of Aquatic Products

3 Terms and definitions

The terms and definitions defined in GB/T 36193 apply to this document.

4 Requirements

4.1 Raw materials The algae and spores of *Haematococcus pluvialis* should be fresh, of good quality, and free of other microalgae.

4.2 Processing water Processing water should comply with the requirements of GB 5749.

4.3 Sensory requirements It should comply with the requirements in Table 1.