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NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB 19821-2025

Replacing GB 19821-2005

Discharge standard of water pollutants for fermented alcohol and alcoholic manufacturing industry

酒类制造业水污染物排放标准

Issued on: December 2, 2025 **Implemented on: January 1, 2027**

Issued by: the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China, Standardization Administration of the People's Republic of China

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Foreword

This document was issued on 2 December 2025 by the the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China, Standardization Administration of the People's Republic of China and takes effect on 1 January 2027.

It is a GB standard without the /T suffix: compliance is mandatory in China.

The document runs to 15 pages in translation. The identification, the dates, the table of contents and the clauses reproduced on this page are taken from the standard itself.

GB 19821-2025 Discharge standard of water pollutants for fermented alcohol and alcoholic manufacturing industry English, Anglais, Englisch, Inglés, ???

Discharge standard of water pollutants for fermented alcohol and alcoholic manufacturing industry

It replaces GB 19821-2005, which is superseded.

1 Scope

GB 19821-2025 is the Chinese discharge standard for water pollutants from the alcoholic drinks industry: breweries, distilleries and wineries. Fermentation produces a strong organic effluent, and the spent wash from a Chinese baijiu distillery is one of the highest-strength industrial wastewaters there is, which is why this sector has had its own standard since 2005. The document sets the water pollutant discharge control requirements, the monitoring requirements, the specifications for the discharge outlet and the rules for implementation and supervision, and it applies to existing plants as well as to the

environmental impact assessment, the treatment plant design and the completion acceptance of new ones. The 2025 edition, effective 1 January 2026, replaces GB 19821-2005. For a brewer or distiller operating in China, or for anyone designing effluent treatment for one, this is the governing text.

This standard specifies the control requirements, monitoring requirements, and supervision and management requirements for water pollutant discharge from the fermented alcohol and alcoholic manufacturing industry.

This standard applies to the management of water pollutant discharge from existing pollutant discharging units and production facilities in the fermented alcohol and alcoholic manufacturing industry, as well as to the environmental impact assessment of construction projects in the fermented alcohol and alcoholic manufacturing industry, the design of environmental protection facilities, the acceptance of completed environmental protection facilities, the issuance of pollutant discharge permits, and the management of water pollutant discharge after these projects are put into operation.

This standard also applies to the management of water pollutant discharge from centralized wastewater treatment facilities serving the fermented alcohol and alcoholic manufacturing industry.

The water pollutant discharge control requirements specified in this standard apply to the direct or indirect discharge of water pollutants outside the legal boundaries by pollutant discharging units, production facilities, and centralized wastewater treatment facilities in the fermented alcohol and alcoholic manufacturing industry.

2 Normative References

The following documents, or the clauses cited therein, are referenced in this standard. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including all amendments) applies. If other documents are superseded, modified, or revised by new ones, the new documents apply.

GB 15562.1 Environmental Protection Graphic Signs - Discharge Outlet (Source)

GB/T 4754-2017 Industrial Classification for National Economic Activities

GB/T 11893 Water Quality - Determination of Total Phosphorus - Ammonium Molybdate Spectrophotometric Method

GB/T 11901 Water Quality - Determination of Suspended Solids - Gravimetric Method

HJ 91.1 Technical Specifications for Wastewater Monitoring

HJ 195 Water Quality - Determination of Ammonia Nitrogen - Gas-phase Molecular Absorption Spectrometry

HJ 199 Water Quality - Determination of Total Nitrogen - Gas-phase Molecular Absorption Spectrometry

HJ/T 399 Water Quality - Determination of Chemical Oxygen Demand - Rapid Digestion Spectrophotometric Method

HJ 493 Water Quality - Technical Regulations on Sample Preservation and Management

HJ 494 Water Quality - Guidance on Sampling Techniques

HJ 495 Water Quality - Technical Regulations on Sampling Program Design

HJ 505 Water Quality - Determination of Biochemical Oxygen Demand (BOD5) after 5 Days - Dilution and Inoculation Method

HJ 535 Water Quality - Determination of Ammonia Nitrogen - Nessler's Reagent Spectrophotometric Method

3 Terms and Definitions

For the purposes of this standard, the following terms and definitions apply.

3.1

fermented alcohol and alcoholic manufacturing industry

The manufacturing industry producing fermented alcohol, baijiu, beer, wine, huangjiu, and other alcoholic beverages, covering all classifications under Manufacture of Alcohol (C151) in GB/T 4754-2017.

3.2

fermented alcohol manufacture

The production activity of manufacturing alcohol products such as edible alcohol, industrial alcohol, and denatured fuel ethanol from starch-based materials, molasses, or other biomass through processes such as cooking, saccharification, fermentation, and distillation.

3.3

baijiu manufacture

The production activity of manufacturing distilled spirits from grains as the main raw material, using Daqu, Xiaoqu, Fuqu, enzyme preparations, and yeast as saccharifying and fermenting agents, through processes such as cooking, saccharification, fermentation, distillation, aging, and blending.

3.4

beer manufacture

The process of producing beer malt from barley or wheat through steeping, germination, drying, and root removal, as well as the production activity of manufacturing beer from malt and water as the main raw materials, with the addition of hops (including hop products), through processes such as saccharification, fermentation, filtration, and filling.

3.5

craft beer brewery

A production unit that possesses a complete craft beer brewing production and auxiliary production system, fixed production premises, and personnel, specializing in beer production and processing, and has legally obtained a food production license for beer products.

Note: "Craft beer" refers to beer produced by small-scale beer production lines, characterized by distinct flavors and produced without adding substances unrelated to adjusting beer flavor during the brewing process.

3.6

wines manufacture

The production activity of manufacturing fermented wine containing a certain alcohol content from grapes or grape juice through full or partial alcoholic fermentation.

3.7

huangjiu manufacture

The production activity of manufacturing fermented wine from rice, glutinous millet, millet, corn, wheat, water, etc., as main raw materials, through processes such as cooking, addition of Qu (starter), saccharification, fermentation, pressing, filtration, pasteurization, and storage.

3.8

other alcoholic drinks manufacture

The production and manufacturing of alcoholic beverages other than fermented alcohol, baijiu, beer, wine, and huangjiu (including lujiu, fruit wines, blended alcoholic beverages, etc.).

3.9

lujiu manufacture

The production activity of manufacturing beverage alcohol with specific styles, using huangjiu or baijiu as the base, by adding substances that are both traditional food and Chinese medicinal herbs, specific food raw/auxiliary materials, or substances complying with relevant regulations, through extraction and/or re-distillation processes, or by directly