

ICS 11.080
CCS C59



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

GB 28931-2024

Replacing GB 28931-2012

**Hygienic requirements for chlorine dioxide disinfectant
generator**

二氧化氯消毒剂发生器卫生要求

Issued on: June 25, 2024

Implemented on: July 1, 2025

**Issued by: State Administration for Market Regulation;
Standardization Administration of China**

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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 28931-2012 "Safety and Hygiene Standard for Chlorine Dioxide Disinfectant Generators". In addition to structural adjustments and editorial changes, the main technical changes are as follows: Changed and deleted some terms and definitions (see 3.3, 3.6, 3.1.1, 3.4, 3.5, 3.6,

3.8 of the.2012 edition); - Changed the raw material requirements (see Chapter 4,

5.2 of the.2012 edition); - Changed the generator structure requirements, added heating system and disinfectant sampling port (see 5.1,

5.1 of the.2012 edition); - The requirements for gas-liquid separation function have been changed (see 5.2.8,

5.3.8 of the.2012 edition); - The technical requirements for generators have been changed (see 5.3,

5.4 of the.2012 edition); - Changed the drinking water disinfection control method and requirements (see 5.4,

5.5 of the.2012 edition); - Added requirements for disinfection effectiveness in generator applications (see 5.5); - Changed the description of disinfection scope (see Chapter 6, Chapter 6 of the.2012 edition); - The recommended concentration and disinfection method for the chlorine dioxide solution generated by the generator to disinfect the object have been changed (see 7.1, Appendix A, Chapter 7 of the.2012 edition); Changed the sampling requirements for water disinfection (see 7.2,

8.5 of the.2012 edition); - Changed the requirements for online monitoring and control of

generators (see 7.3,

8.6 of the.2012 edition); - Added the test method for disinfection effect (see 7.4); - The requirements for factory inspection items and results have been changed (see 8.1.2,

8.1.2 of the.2012 edition); - "Marking and Packaging" (Chapter 9 of the.2012 edition) has been deleted; - Changed the nameplate and instruction manual requirements (see Chapter 10, Chapter 11 of the.2012 edition); - The chlorine dioxide determination method was changed, UV-visible spectrophotometry was added, and the five-step iodine titration method was modified (see Appendix B,.2012 edition). Appendix A). 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 is proposed and coordinated by the National Center for Disease Control and Prevention. The previous versions of this document and the documents it replaces are as follows: First published in.2012 as GB 28931-2012; This is the first revision. - Hygienic requirements for chlorine dioxide disinfectant generators

1 Scope

GB 28931-2024 is the Chinese national standard on hygienic requirements for chlorine dioxide disinfectant generator, in the field of health care technology. It carries no /T suffix, which in the Chinese system means compliance is mandatory: a product or a practice within its scope has to meet it to be lawfully made, sold or carried out in China. It was issued on 25 June 2024 by the State Administration for Market Regulation; Standardization Administration of China, and has been in force since 1 July 2025. Classification: ICS 11.080, CCS C59. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

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 317 White sugar

GB/T 320 Synthetic hydrochloric acid for industrial use

GB/T 534 Industrial sulfuric acid

GB/T 1616 Industrial hydrogen peroxide

GB/T 1618 Industrial sodium chlorate GB/T 2440 Urea

GB/T 3624 Titanium and titanium alloy seamless pipes

GB 5083 General principles for safety and sanitation design of production equipment

GB/T 5462 Industrial Salt

GB 5749 Sanitary standard for drinking water

GB/T 10002.1 Rigid polyvinyl chloride (PVCU) pipes for water supply

GB 14930.2 National Food Safety Standard Disinfectants

GB/T 22789.1 Plastic products - Rigid polyvinyl chloride sheets (sheets) - Part

GB 25025 Technical requirements for glass-lined equipment

GB/T 25295 Guidelines for safety design of electrical equipment

GB/T 26366 Hygienic requirements for chlorine dioxide disinfectants

GB 27948 General requirements for air disinfectants

GB 27949 General requirements for disinfectants for medical devices

GB 27952 General requirements for surface disinfectants for common objects

GB 27953 General requirements for disinfectants in epidemic areas

GB 30689 Hygiene requirements for automatic cleaning and disinfection machines for endoscopes

GB 38598 General requirements for labels and instructions for disinfection products

HG/T 3250 Industrial Sodium Chlorite

HG/T 4516 Industrial Sodium Bisulfate HG 20536 PTFE lined equipment

JB/T 2932 Technical requirements for water treatment equipment WS/T 10009 Testing methods for disinfection products