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

**GB/T 43377-2023**

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**Gaseous breathing oxygen supplies for civil aircraft**

民用飞机呼吸用气态氧

**(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 is modified to adopt ISO 2046:1973 "Gaseous Oxygen for Aircraft Breathing":

Compared with ISO 2046:1973, this document has made the following structural adjustments:

---Added normative reference documents in Chapter 2;

---Added Chapter 3 Terms and Definitions;

---Added Chapter 4 type;

---Chapter 5 corresponds to Chapter 2 in ISO 2046:1973, and Chapter 6 corresponds to Chapter 3 in ISO 2046:1973:

The technical differences between this document and ISO 2046:1973 and their reasons are as follows:

---Added normative reference document GB/T 28285 (see Chapter 3) to adapt to my country's technical conditions;

---The gaseous oxygen type increases chemical oxygen production (see Chapter 4), which is currently widely used;

--- Since the type of gaseous oxygen increases chemical oxygen production, the pressure, purity, moisture content and other requirements for chemical oxygen production are correspondingly increased (see Section 5 Chapter, 6:1 and 6:2):

The following editorial changes have been made to this document:

---Change the name of the standard to "Gaseous Oxygen for Breathing by Civil Aircraft":

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 specifies the types, pressures and characteristics of gaseous oxygen for breathing by civil aircraft:

This document applies to gaseous oxygen for breathing by personnel on board civil aircraft:

## 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 28285 Aircraft Oxygen System Terminology

## 3 Terms and definitions

The terms and definitions defined in GB/T 28285 apply to this document:

## 4 Types

Types of gaseous oxygen generally include high-pressure gas oxygen and chemically generated oxygen:

## 5 Pressure

High-pressure oxygen should be filled into the oxygen cylinder at an effective pressure and reach its maximum working pressure:

**Note:** The working pressure range of high-pressure oxygen for aircraft is 3MPa~21MPa:

The maximum working pressure of chemical oxygen production should not exceed 343kPa:

## 6 Features

### 6.1

Purity

The purity requirements for gaseous oxygen used for breathing by civil aircraft are as follows:

a) High-pressure oxygen, the oxygen content percentage should not be less than 99.5%, and the maximum concentration of other main components should meet the requirements specified in Table 1:

Table 1 Maximum concentrations of other main components of high-pressure oxygen

Category Hyperbaric Oxygen Carbon dioxide 0.01% Carbon monoxide 0.0005%