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**JJF**

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**Calibration Specification for Chlorine Alarm Detectors  
(English Translation)**

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## Introduction

In the present specification JJF 1071-2010 "National Calibration Specifications writing rules", JJF 1001-2011 "Universal Measurement Terms and definitions" and JJF 1059.1-2012 "Evaluation and Expression of Uncertainty in Measurement" as the basic specification series be developed.

This specification is in accordance with GB 12358-2006 "workplace environment gas detection alarm general technical requirements" and HG/T 23006-1992 Technical Requirements "toxic gas detection alarm technical requirements and test methods" and the party Law and GB 50493-2009 "Petroleum and Chemical combustible gases and toxic gas detection and alarm design specifications" indicated Alarm equipment selection is performed making.

Indication Error of this specification to measure the relative error is expressed.

The specification for the first time to develop.

Chlorine alarm detector calibration specification

### 1 Scope

This standard applies to the measurement range (0 ~ 10)  $\mu\text{mol/mol}$  to (0 ~ 1000)  $\mu\text{mol/mol}$  chlorine detector newspaper Police instrument (hereinafter referred to as equipment) calibration of other instruments for the detection of chlorine can refer to this specification for calibration.

### 2. References

GB 12358-2006 workplace environment gas detection alarm general technical requirements GB 50493-2009 Petroleum and Chemical combustible gases and toxic gas detection and alarm design specifications HG/T 23006-1992 toxic gas detection alarm technical requirements and testing methods for dated references, only the dated edition applies to this specification; undated reference documents Member, the latest edition (including any amendments) applies to this specification.

### 3 Overview

Instrument detector main diaphragm electrode type, constant potential electrolysis type and/or semiconductor type. Sampling methods are diffused and inhaled. The main structure consists of detecting elements, amplifying circuit, alarm system, display and other components.

### 4 Metrological characteristics

4.1 Indication error the maximum permissible error.  $\pm 10\%$ .

#### 4.2 Repeatability

Repeatability is not more than 3%.

#### 4.3 Response Time

Diffusion of not more than 60s, inhaled not more than 30s.

#### 4.4 Alarm function

Instrument with alarm function, alarm function should be normal.

#### 4.5 Drift

4.5.1 Zero drift.  $\pm 3\%$  FS.

4.5.2 Span drift.  $\pm 5\%$  FS.

**Note:** The above indicators are not used to determine eligibility for reference only.

### 5 calibration conditions

#### 5.1 Environmental conditions

5.1.1 Ambient temperature. (15 ~ 35) °C.

5.1.2 Relative humidity.  $\leq 85\%$ .

5.1.3 work environment should not affect the normal operation of the instrument and electromagnetic interference gas calibration site should be ventilated and