



JAPANESE
INDUSTRIAL
STANDARD

Translated and Published by
Japanese Standards Association

JIS K 1102 : 2000

Liquid chlorine for industrial use—
Determination of the chlorine
content

ICS 71.060.10

Descriptors : liquid chlorine, liquefied gases, chlorine

Reference number : JIS K 1102 : 2000 (E)

Foreword

This translation has been made based on the original Japanese Industrial Standard revised by the Minister of International Trade and Industry through deliberations at the Japanese Industrial Standards Committee in accordance with the Industrial Standardization Law. Consequently **JIS K 1102 : 1959** is replaced with **JIS K 1102 : 2000**.

This revision has been based on **ISO 2120 : 1972** for the purpose of conforming with the International Standard.

Date of Establishment: 1951-12-27

Date of Revision: 2000-07-20

Date of Public Notice in Official Gazette: 2000-07-21

Investigated by: Japanese Industrial Standards Committee
Divisional Council on Chemical

JIS K 1102:2000, First English edition published in 2001-07

Translated and published by: Japanese Standards Association
4-1-24, Akasaka, Minato-ku, Tokyo, 107-8440 JAPAN

In the event of any doubts arising as to the contents,
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Printed in Japan

Liquid chlorine for industrial use— Determination of the chlorine content

Introduction This Japanese Industrial Standard has been prepared based on the first edition of **ISO 2120** *Liquid chlorine for industrial use—Determination of the content of chlorine by volume in the vaporized product* published in 1972. The test method specified in the corresponding International Standard has been rejected because of its use of harmful reagents and so on, and the test method with safe reagents has been accepted as the Japanese Industrial Standard.

The sidelined parts are the items of modified provisions in the corresponding International Standard or the items not contained in the corresponding International Standard.

1 Scope This Standard specifies a method for the determination of the chlorine content in vaporized gas by volume after vaporization of liquid chlorine.

Remarks 1 The International Standard corresponding to this Standard is as follows.

ISO 2120 : 1972 *Liquid chlorine for industrial use—Determination of the content of chlorine by volume in the vaporized product*

2 For the matter to be attended in sampling of liquid chlorine, Annex (informative) shall be referred to.

2 Normative references The following standards contain provisions which, through reference in this Standard, constitute provisions of this Standard. The most recent editions of the standards (including amendments) indicated below shall be applied.

JIS K 8150 *Sodium chloride*

JIS K 8913 *Potassium iodide*

JIS K 8951 *Sulfuric acid*

3 Test method

3.1 Summary A known volume of the gas (approximately 100 ml or approximately 500 ml) obtained by vaporization of liquid chlorine is taken, and the chlorine is absorbed in potassium iodide solution (100 g/l).

The residual, non-condensable gases such as H₂, O₂, N₂, CO, CO₂, are measured, and the rate of absorbed chlorine to the quantity of sample taken is calculated.

3.2 Reagents The reagents shall be as follows.

- a) **Potassium iodide solution (100 g/l)**, prepared by dissolving 100 g of potassium iodide specified in **JIS K 8913** in saturated salt aqueous solution to make the volume become 1 000 ml.