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**Testing methods for
polychlorobiphenyl in industrial
water and wastewater**

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Reference number : JIS K 0093 : 2006 (E)

Foreword

This translation has been made based on the original Japanese Industrial Standard revised by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee as the result of proposal for revision of Japanese Industrial Standard submitted by Japan Industrial Water Association (JIWA)/Japanese Standards Association (JSA) with the draft being attached, based on the provision of Article 12 Clause 1 of the Industrial Standardization Law applicable to the case of revision by the provision of Article 14.

Consequently **JIS K 0093** : 2002 is replaced with this Standard.

Attention is drawn to the possibility that some parts of this Standard may conflict with a patent right, application for a patent after opening to the public, utility model right or application for registration of utility model after opening to the public which have technical properties. The relevant Minister and the Japanese Industrial Standards Committee are not responsible for identifying the patent right, application for a patent after opening to the public, utility model right or application for registration of utility model after opening to the public which have the said technical properties.

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In the event of any doubts arising as to the contents,
the original JIS is to be the final authority.

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Testing methods for polychlorobiphenyl in industrial water and wastewater

1 Scope This Japanese Industrial Standard specifies the testing method for polychlorobiphenyl (hereafter referred to as “PCB”) in industrial water and wastewater, using gas chromatography or gas chromatography–mass spectrometry.

NOTES 1 The objects of this Standard are admixtures from monochlorobiphenyl to decachlorobiphenyl.

2 The gas chromatography is the method of determination for total PCB and the gas chromatography–mass spectrometry is the method of determination for PCB in every isomer of the same number of chlorine. When the quantities of total PCB are obtained by these two methods, in some cases, the determined values are not identical due to the characteristics of respective methods.

2 Normative references The standards given in attached table 1 contain provisions which, through reference in this text, constitute provisions of this Standard. The most recent editions of the standards (including amendments) shall be applied.

3 Common items The common items are as follows:

- a) **General rules** General rules for chemical analysis shall be based on **JIS K 0050**.
- b) **Definitions** For the purposes of this Standard, the definitions given in **JIS K 0101**, **JIS K 0102**, **JIS K 0211** and **JIS K 0215** apply.
- c) **Gas chromatography** The common items for gas chromatography shall comply with **JIS K 0114**.
- d) **Gas chromatography–mass spectrometry** The common items for gas chromatography–mass spectrometry shall comply with **JIS K 0123**.
- e) **Determination range** The determination range shown in each testing method is expressed by mass (ng) of PCB in solvent to be injected into equipment used for each testing method.
- f) **Repeatability** The repeatability shall be represented by approximate value of coefficient of variation (%) obtained through repeated tests using standard solution.
- g) **Water** The water used in this Standard shall comply with A1 to A4 in **JIS K 0557**.
- h) **Reagents**
 - 1) Reagents specified in **JIS** without detrimental effects on test shall be used. If not specified in **JIS**, they shall be those without detrimental effects on test.
 - 2) The concentration of standard liquid is represented by mg/ml, µg/ml or ng/ml.