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Method for determination of tetra-through octachlorodibenzo-*p*-dioxins, tetra-through octachlorodibenzofurans and dioxin-like polychlorinatedbiphenyls in industrial water and waste water

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Mita MT Building, 3-13-12, Mita, Minato-ku, Tokyo, 108-0073 JAPAN

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

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Foreword

This Japanese Industrial Standard has been revised by the Minister of Economy, Trade and Industry, through deliberations at the Japanese Industrial Standards Committee in accordance with the Industrial Standardization Act. This edition replaces the previous edition (**JIS K 0312**:2008), which has been technically revised.

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Method for determination of tetra-through octachlorodibenzo-*p*-dioxins, tetra-through octachlorodibenzofurans and dioxin-like polychlorinatedbiphenyls in industrial water and waste water

Introduction

This Japanese Industrial Standard was established in 1999 as "Method for determination of tetra-through octachlorodibenzo-*p*-dioxins, tetra-through octachlorodibenzofurans and coplanar polychlorobiphenyls in industrial water and waste water", and has gone through three revisions including this one. This Standard has been prepared based on **ISO 18073**:2004, Edition 1, and **ISO 17858**:2007, Edition 1, with some modifications of the technical contents.

The vertical lines on both sides and dotted underlines indicate changes from the corresponding International Standards. A list of modifications with the explanations is given in Annex JE. Annex JA to Annex JD are unique to **JIS** and not given in the corresponding International Standards.

1 Scope

This Standard specifies a method for the determination of tetra-through octachlorodibenzo-*p*-dioxins, tetra-through octachlorodibenzofurans and dioxin-like PCBs in industrial water and waste water using a gas chromatograph/mass spectrometer (hereafter referred to as GC-MS). The GC-MS employed in this Standard shall be the double-focusing mass spectrometer (hereafter referred to as MS) where the capillary column of a gas chromatograph (hereafter referred to as GC) is used and its resolution is 10 000 or more.

NOTE The International Standards corresponding to this Standard and the symbol of degree of correspondence are as follows.

ISO 18073:2004 *Water quality—Determination of tetra- to octa-chlorinated dioxins and furans—Method using isotope dilution HRGC/HRMS*

ISO 17858:2007 *Water quality—Determination of dioxin-like polychlorinated biphenyls—Method using gas chromatography/mass spectrometry* (overall evaluation: MOD)

In addition, symbols which denote the degree of correspondence in the contents between the relevant International Standards and **JIS** are IDT (identical), MOD (modified), and NEQ (not equivalent) according to **ISO/IEC Guide 21-1**.

WARNING Since dioxins are very toxic, inhalation, accidental ingestion, direct contact to skin, etc. shall be avoided as much as possible, and ventilation of pretreatment room and analysis room and control of waste liquid and waste shall be sufficiently carried out. Since the health of the measurer may be damaged by inhalation or accidental ingestion