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Method for determination of tetra-through octachlorodibenzo-*p*-dioxins, tetra-through octachlorodibenzofurans and dioxin-like polychlorinatedbiphenyls in stationary source emissions

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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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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 0311**:2008), which has been technically revised.

Attention is drawn to the possibility that some parts of this Standard may conflict with patent rights, published patent application or utility model rights. The relevant Minister and the Japanese Industrial Standards Committee are not responsible for identifying any of such patent rights, published patent application or utility model rights.

Method for determination of tetra-through octachlorodibenzo-*p*-dioxins, tetra-through octachlorodibenzofurans and dioxin-like polychlorinatedbiphenyls in stationary source emissions

Introduction

This Japanese Industrial Standard was established in 1999, and has gone through three revisions including this one. After the previous revision was made in 2008, organic solvents used for extraction have been designated as specified chemical substances in the Industrial Safety and Health Act. In step with this, this Standard has been revised in order to ensure the safety of analytical workers.

No corresponding International Standard has been established at this point.

1 Scope

This Standard specifies a method for the determination of tetra-through octachlorodibenzo-*p*-dioxins, tetra-through octachlorodibenzofurans and dioxin-like PCBs in flue gas which are generated by combustion and chemical reactions, and discharged to a flue, stack or duct (hereafter referred to as duct) in stationary source emissions 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.

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 of other drugs, solvents, etc., the handling shall be carried out as carefully as possible, and attention shall be paid to sufficient ventilation in the laboratory.

2 Normative references

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

JIS K 0095 *Methods for sampling of flue gas*

JIS K 0114 *General rules for gas chromatography*

JIS K 0123 *General rules for gas chromatography/mass spectrometry*

JIS K 0211 *Technical terms for analytical chemistry (General part)*

JIS K 0215 *Technical terms for analytical chemistry (Analytical instrument part)*