JIS

JAPANESE
INDUSTRIAL
STANDARD

Translated and Published by
Japanese Standards Association

JIS K 0350-70-10 : 2005

(JIWA/JSA)

Testing method for detection of *Sphaerotilus* in industrial water

ICS 13.060.25; 13.060.70

Reference number : JIS K 0350-70-10 : 2005 (E)

Foreword

This translation has been made based on the original Japanese Industrial Standard established by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee according to the proposal of establishing a Japanese Industrial Standard from Japan Industrial Water Association (JIWA)/Japanese Standards Association (JSA), with a draft of Industrial Standard based on the provision of Article 12 Clause 1 of the Industrial Standardization Law.

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.

Date of Establishment: 2005-01-20

Date of Public Notice in Official Gazette: 2005-01-20

Investigated by: Japanese Industrial Standards Committee

Standards Board

Technical Committee on Environment and Recycling Policy

JIS K 0350-70-10:2005, First English edition published in 2005-05

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, the original JIS is to be the final authority.

Contents

Testing method for detection of *Sphaerotilus* in industrial water

1 Scope This Japanese Industrial Standard specifies the testing method for the qualitative judgement of the existence of *Sphaerotilus* in industrial water by using a microscope.

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

3 Definitions For the purposes of this Standard, the definitions given in **JIS K 0101**, **JIS K 0102**, **JIS K 0211**, **JIS K 0550** and the following definition apply.

3.1 *Sphaerotilus* bacteria in which cylindrical bacilli of 1 μm × (2.0 to 6.0) μm form a filamentous form standing in a line in transparent sheaths, and form a light grey flosculent colony (MIZUWATA)

Remarks : *Sphaerotilus* is one of the representative bacteria in the pollution index which grows in water containing many organic compounds such as domestic drainage and industrial waste water.

Sphaerotilus natans is the well known name of one of the representative bacteria in the pollution index.

Sphaerotilus is usually called MIZUWATA, forms much slime and flock in industrial water, and its propagation causes various obstacles such as the filtration obstacle in water purifying process, the degeneration of water quality such as generation of offensive smell, the blockage of water supply and drainage or water cooling system, etc., the reduction in efficiency of heat exchanger.

4 Common matters The common matters shall be as follows.

4.1 Glassware The glassware, which are specified in **JIS R 3503** and **JIS R 3505**, shall be generally used. When special instruments are required, an example of it is illustrated or explained respectively.

5 Sample

5.1 Sampling

5.1.1 Reagents The reagents shall be as follows:

a) **Formaldehyde solution** Formaldehyde solution [37 % (mass percentage)] (1)(2) specified in **JIS K 8872** shall be used.

Notes (1) The handling of formaldehyde solution shall follow the related laws and regulations and care shall be sufficiently taken.