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(JPI/JSA)

Readily biodegradable electrical insulating oils — Part 2: Natural esters (Vegetable oils)

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In the event of any doubts arising as to the contents,
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Foreword

This Japanese Industrial Standard has been established by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee according to the proposal for establishment of Japanese Industrial Standard submitted by The Japan Petroleum Institute (JPI)/Japanese Standards Association (JSA) with a draft being attached, based on the provision of Article 12, paragraph (1) of the Industrial Standardization Act.

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JIS C 2390 series consists of the following 3 parts under the general title *Readily biodegradable electrical insulating oils*:

Part 1: Synthetic ester

Part 2: Natural esters (Vegetable oils)

Part 3: Modified esters derived from vegetable oils

NOTE Based on Article 9 of the Supplementary Provisions to the Unfair Competition Prevention Act etc., any submission of proposal, or employment of procedures such as deliberation by the Japanese Industrial Standards Committee under the previous Industrial Standardization Act shall be deemed to have been conducted pursuant to the provision of Article 12, paragraph (1) of the revised Industrial Standardization Act.

Readily biodegradable electrical insulating oils — Part 2 : Natural esters (Vegetable oils)

Introduction

This Japanese Industrial Standard has been prepared based on **IEC 62770** : 2013, Edition 1, with some modifications of the technical contents in consideration of the distribution situation of electrical insulating oils in Japan.

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

1 Scope

This Standard specifies requirements for unused natural esters (vegetable oils) that are used as insulating media and/or heat exchange media for oil-impregnated capacitor, oil-filled cables, oil-immersed transformer, oil circuit breakers, and other oil-filled electrical equipment.

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

IEC 62770 : 2013 *Fluids for electrotechnical applications — Unused natural esters for transformers and similar electrical equipment* (MOD)

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

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this Standard. For standards with the year indication, only the editions of the indicated year shall be applied and the revisions (including amendments) made thereafter shall not be applied. For those without the indication of the year, the most recent editions (including amendments) shall be applied.

JIS C 2101 *Testing methods of electrical insulating oils*

JIS K 2265-4 *Determination of flash points — Part 4 : Cleveland open cup method*

JIS Z 1601 *Tight head steel drums*

JIS Z 1602 *18 liter metal cans*

JIS Z 1620 *Steel pails*

OECD 301 : 1992 *OECD GUIDELINE FOR TESTING OF CHEMICALS — Ready*