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(JALOS/JSA)

**Refrigerating machine oils**

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In the event of any doubts arising as to the contents,  
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## 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 Lubricating Oil Society (JALOS)/ 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 2211**:1992 has been replaced with this Standard.

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# Refrigerating machine oils

## Introduction

This Japanese Industrial Standard was established in 1956 and has gone through seven revisions to this day, the most recent of which was taken place in 1992. Afterwards, CFC-12 (Freon 12) and CFC-22 (Freon 22) specified as the refrigerant to be used have become subject to CFC restriction, and the corresponding JISs have been withdrawn. According to this, **JIS K 1560** has been established as the new standard of refrigerant, and the revision of this time is to correspond to this modification.

The corresponding International Standard has not yet been published at this moment, but the first edition of **ISO 6743-3** published in 2003 has been referred to for the classification of refrigerating machine oils.

**Warning:** The use of this Standard may involve hazardous materials, operations and equipment. This Standard does not purport to address all of the safety problems associated with its use. It is the responsibility of the user of this Standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

## 1 Scope

This Standard specifies the refrigerating machine oils to be used as the lubricating oils for refrigerators.

## 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) listed below shall be applied.

JIS B 7410 *Liquid-in-glass thermometers for testing of petroleum product*

JIS C 2101 *Testing methods of electrical insulating oils*

JIS C 2504 *Soft magnetic irons*

JIS C 3102 *Annealed copper wires for electrical purposes*

JIS H 4040 *Aluminium and aluminium alloy rods, bars and wires*

JIS K 1560 *1,1,1,2-Tetrafluoroethane (HFC-134a)*

JIS K 2001 *Industrial liquid lubricants—ISO viscosity classification*

JIS K 2251 *Crude petroleum and petroleum products—Sampling*

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

JIS K 2269 *Testing methods for pour point and cloud point of crude oil and petroleum products*

JIS K 2275 *Crude oil and petroleum products—Determination of water content*

JIS K 2283 *Crude petroleum and petroleum products—Determination of kinematic viscosity and calculation of viscosity index from kinematic viscosity*