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Engine antifreeze coolants

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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 as the result of proposal for revision of Japanese Industrial Standard submitted by Japan Auto Chemical Industry Association (JACA)/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 2234:2006** is replaced with this Standard.

However, **JIS K 2234: 2006** may be applied in the **JIS** mark certification based on the relevant provisions of Article 19 Clause 1, etc. of the Industrial Standardization Law until Aug 19, 2019.

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Engine antifreeze coolants

Introduction

This Japanese Industrial Standard was established in 1965 and has gone through six revisions up to the present. The previous revision was made in 2006. Then, Class 1 AF standard, which is no longer used, is abolished, and only Class 2 LLC (LLC stands for long life coolant) is adopted in this Standard. This revision also includes the changes in the specified values of corrosion property on heating surface of aluminium casting.

No corresponding International Standard has been established at this point.

1 Scope

This Standard specifies the antifreeze coolants (hereafter referred to as antifreeze coolants) mainly composed of ethylene glycol, which are employed for prevention of freezing of cooling liquid used in a liquid-cooled internal combustion engine (hereafter referred to as cooling liquid) and for corrosion prevention of the cooling system. Antifreeze coolants shall be an aqueous solution with a concentration from 30 % volume fraction to 60 % volume fraction.

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 edition (including amendments) shall be applied.

JIS B 2401-1 *O-rings — Part 1 : O-rings*

JIS B 7414 *Glass thermometers*

JIS B 7505-1 *Aneroid pressure gauges — Part 1 : Bourdon tube pressure gauges*

JIS B 7507 *Vernier, dial and digital callipers*

JIS B 8372-1 *Pneumatic fluid power — Compressed air pressure regulators and filter-regulators — Part 1 : Main characteristics to be included in literature from suppliers and product-making requirements*

JIS C 1602 *Thermocouples*

JIS D 2602 *Rubber hoses and tubing for cooling systems for internal-combustion engines — Specification*

JIS G 3141 *Cold-reduced carbon steel sheet and strip*

JIS G 3459 *Stainless steel pipes*