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**Lubricants — Determination of rust-
preventing characteristics**

ICS 75.100

Descriptors : lubricating oils, corrosion tests, petroleum products, corrosion protection, corrosion resistance, determination of content

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Foreword

This translation has been made based on the original Japanese Industrial Standard revised by the Minister of International Trade and Industry through deliberations at Japanese Industrial Standards Committee in accordance with the Industrial Standardization Law:

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In the event of any doubts arising as to the contents,
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Lubricants—Determination of rust-preventing characteristics

Introduction This Japanese Industrial Standard has been prepared based on the first edition of **ISO 7120**, *Petroleum products and lubricants—Petroleum oils and other fluids—Determination of rust-preventing characteristics in the presence of water*, published in 1987, without any modification in technical content.

1 Scope This Japanese Industrial Standard specifies the testing method of rust-preventing characteristics of lubricating oil for iron parts in the case where water or sea water has been mixed in the lubricating oil.

Remarks 1 Although the use of this Standard may involve hazardous chemicals, operations and equipment, this Standard does not purport to address all of the safety problems associated with its use. The user of this testing methods shall establish the appropriate rules to take precautions for safety and health prior to use.

2 The lubricating oil designated in this Standard indicates those of mineral oil series or synthetic series and includes the lubricating oil with density larger than water.

This method is suitable specially for turbine oil containing rust-preventing reagent.

3 The normative references of this Standard are shown in Attached Table 1.

4 The corresponding International Standard is shown below.

ISO 7120 : 1987 *Petroleum products and lubricants—Petroleum oil and other fluids—Determination of rust-preventing characteristics in the presence of water*

2 Principle of test A test piece of steel round bar shall be immersed in the mixture of 300 mL of sample and 30 mL of water or artificial sea water and this mixture shall be stirred at the temperature 60 °C for the specified period of time (in general, 24 h) with speed 1 000 r.p.m. to examine the existence of rust which appears on the test piece.

The test shall be conducted on one set of two test pieces for the same sample.

3 Test device for rust-preventing characteristics The test device for rust-preventing characteristics shall consist of the following (1) to (5) and an example is shown in Fig. 1.