ICS 75.140
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NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 19230.1-2025

Replacing GB/T 19230.1-2003

Evaluation of the effectiveness of gasoline detergent - Part 1: Determination of rust-preventing characteristics

汽油清净剂使用效果的评价 第1部分：防锈性能的测定

Issued on: October 5, 2025 **Implemented on: May 1, 2026**

Issued by: State Administration for Market Regulation;
Standardization Administration of the PRC

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part

1.Structure and Drafting Rules of Standardization Documents". Drafting. This document is Part 1 of GB/T 19230.GB/T 19230 has the following parts published.

---Evaluation of the effectiveness of gasoline detergents, Part

1.Determination of rust-preventive properties;

---Test methods for evaluating the effectiveness of gasoline detergents, Part

2.Test methods for the demulsification performance of gasoline detergents;

---Test Methods for Evaluating the Effectiveness of Gasoline Detergents - Part

3.Effect of Gasoline Detergents on Clogged Electronic Orifice Fuel Injectors (PFI) Experimental methods for assessing the effects of plugging tendency;

---Test Methods for Evaluating the Effectiveness of Gasoline Detergents - Part

5.Effects of Gasoline Detergents on Deposits in Gasoline Engine Intake Valves and Combustion Chambers Engine bench test method for influencing the tendency of material formation (Ford 2.3L method);

---Test methods for evaluating the effectiveness of gasoline detergents, Part

6.Effects of gasoline detergents on deposits in gasoline engine intake valves and combustion chambers Engine bench test method (M111 method) for the influence of material generation tendency. This document replaces GB/T 19230.1-2003 "Test methods for evaluating the effectiveness of gasoline detergents - Part

1.Gasoline detergents". The "Test Method for Rust Prevention Performance" differs from GB/T 19230.1-2003 in that, apart from structural adjustments and editorial changes, the main technical changes are as follows:

a) A definition for corrosion has been added (see 3.1);

1 Scope

GB/T 19230.1-2025 is the Chinese national standard covering whether a gasoline detergent package also protects against rust - the steel specimen in gasoline with water added, the exposure conditions, and the rating of the corrosion found, which is what keeps a fuel system from rusting on the water that condenses in every tank. Part 1 of the series. It replaces GB/T 19230.1-2003, in force from 1 May 2026. Issued on 5 October 2025, it has been in force since 1 May 2026, replacing GB/T 19230.1-2003.

---Personnel using this document should have practical experience in formal laboratory work. The use of this document may involve certain hazardous activities. This document does not address all potential safety issues related to the materials, equipment, and operations used. Users are responsible for taking appropriate safety and health precautions. Implement the measures and ensure they comply with the conditions stipulated by relevant national laws and regulations.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included. For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies. This document.

GB/T 699-2015 High-quality carbon structural steel

GB/T 6682-2008 Specifications and test methods for water used in analytical laboratories

GB 17930 Gasoline for Vehicles

3 Terms and Definitions

The following terms and definitions apply to this document.

3.1 rust The surface of the cylindrical test bar exhibits reddish-brown discoloration, black spots, pits, and unevenness.

3.2 Gasoline detergent Added to gasoline or ethanol gasoline to inhibit or remove deposits in the engine intake system, fuel supply system, and/or combustion chamber. The substance of things.

3.3 basetestgasoline The test was conducted to examine the rust-preventive performance of gasoline detergents, using automotive gasoline that meets the technical requirements of GB 17930 and does not contain gasoline detergents.

4.Method Overview At 38°C±1°C, a cylindrical test rod was completely immersed in a

mixture of 300mL test gasoline and 30mL water under stirring. After a 4-hour test, the test bar was removed and the rust marks and degree of rust were observed.