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CCS E61



**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB 19592-2019

Replacing GB 19592-2004

Detergent additive for motor gasoline

车用汽油清净剂

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Foreword

All the technical content in this Standard is mandatory. This Standard was drafted in accordance with the rules in GB/T 1.1-2009. This Standard serves as a replacement of GB 19592-2004 Detergent Additive for Vehicle Gasoline. In comparison with GB 19592-2004, the main technical changes are as follows:

- The scope of application is modified (see Chapter 1);
- Normative references are modified (see Chapter 2);
- The definition of base fuel is modified (see 3.1);
- The definition of detergent additive for motor gasoline is modified (see 3.2);
- The definition of intake system is deleted (see 3.3 in Version 2004);
- The definition of intake valve deposits is modified (see 3.3);
- The definition of total combustion deposits is modified (see 3.4);
- Table content in the previous version is modified into the content in 4.1 (see 4.1; Table 1 in Version 2004);
- Pour point indicator is modified from "not higher than -15 °C" into "not higher than -20 °C" (see Table 1);
- Flash point indicator is modified from "not lower than 45 °C" into "not lower than 60 °C" (see Table 1);
- The technical requirements of sulfur content and chlorine content are added (see Table

1);

---The expression of technical requirements of anti-rust property is modified from "not more than 5%" into "not more than moderate rust" (see Table 1);

1 Scope

GB 19592-2019 is the Chinese national standard on detergent additive for motor gasoline, in the field of petroleum and related technologies. It carries no /T suffix, which in the Chinese system means compliance is mandatory: a product or a practice within its scope has to meet it to be lawfully made, sold or carried out in China. It was issued on 14 October 2019 by the State Administration for Market Regulation; Standardization Administration of China, and has been in force since 1 May 2020. Classification: ICS 75.140, CCS E61. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This Standard stipulates the terms and definitions, requirements, test methods, inspection rules, marking, packaging, transportation, storage and safety of detergent additive for motor gasoline. This Standard is applicable to detergent additives used in motor gasoline and motor ethanol gasoline.

2 Normative References

The following documents are indispensable to the application of this document. In terms of references with a specified date, only versions with a specified date are applicable to this document. In terms of references without a specified date, the latest version (including all the modifications) is applicable to this document.

GB 190 Packing Symbol of Dangerous Goods;

GB/T 261 Determination of Flash Point - Pensky-Martens Closed Cup Method;

GB/T 511 Petroleum, Petroleum Products and Additives - Method for Determination of Mechanical Admixtures;

GB/T 3535 Petroleum Products - Determination of Pour Point;

GB/T 4756 Method for Manual Sampling of Petroleum Liquids;

GB/T 11140 Standard Test Method for Sulfur in Petroleum Products by Wavelength Dispersive X-ray Fluorescence Spectrometry;

GB 17930 Gasoline for Motor Vehicles;

GB/T 19230.1 Test Method for Evaluating Gasoline Detergent in Use - Part

1. Test Method for Rust-preventing Characteristics of Gasoline Detergent;

GB/T 19230.2 Test Method for Evaluating Gasoline Detergent in Use - Part

2. Test Method for Demulsibility of Gasoline Detergent;

3 Terms and Definitions

The following terms and definitions are applicable to this document.

3.1 Base Fuel Base fuel refers to fuel that is used to inspect a certain property of additives in tests. Base fuel has satisfying distinctiveness and does not include additives that may improve the property being inspected.

3.3 Intake Valve Deposits; IVDs Intake valve deposits refers to any matters that are generated by fuel, lubricating oil and additives, or, inhaled from the outside, and deposit on the surface of intake valve.

3.4 Total Combustion Deposits; TCDs Total combustion deposits refers to any matters that are generated by fuel, lubricating oil and additives, or, inhaled from the outside, and deposit on the part of combustion chamber (cylinder head and piston top).

4 Requirements and Test Methods

4.1 Chemical substances that may generate ash content cannot be manually added to detergent additive for motor gasoline. Motor gasoline and motor ethanol gasoline, which adds detergent additive in accordance with the recommended dosage, shall comply with corresponding standards.

4.2 The technical requirements and test methods of detergent additive for motor gasoline are shown in Table 1.

5.1 Inspection Classification and Inspection Items

5.1.1 Exit-factory inspection Exit-factory batch inspection items include. appearance, pour point, flash point (closed cup), nitrogen content, sulfur content, chlorine content, anti-rust property, demulsification, simulated intake valve deposit mass.

5.1.2 Type inspection Type inspection items include all the items stipulated in the technical requirements in Table 1.

5.3 Sampling Sampling shall comply with GB/T 4756. Sampling quantity shall be not less than 1 L; reserve for inspection and as reserved sample.

5.4 Determination Rules When the result of exit-factory inspection and the result of type inspection completely comply with the stipulations in Chapter 4, then, the batch of products shall be determined as qualified. When the result of simulated intake valve deposit mass

and the result of average intake valve deposit mass in engine test are contradictory, the result of engine test shall be subject to.

5.5 Re-inspection Rules If the result of exit-factory inspection and the result of type inspection do not comply with the requirements of this Standard, re-take a double size of samples from the same batch of products; conduct re-inspection of the disqualified items.

6 Marking, Packaging, Transportation and Storage

Detergent additive for motor gasoline belongs to flammable liquid. The marking, packaging, transportation, storage and delivery inspection of products shall comply with SH/T 0164, GB 30000.7-2013, GB 190 and NB/SH/T 0967.