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NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 19230.2-2003

Test method for evaluating gasoline detergent in use--Part 2: Test method for demulsibility of gasoline detergent

评价汽油清净剂使用效果的试验方法 第2部分: 汽油清净剂破乳性能试验方法

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Foreword

GB/T 19230-2003 "Test method for evaluating gasoline detergent in use" is divided into six parts. - Part

1 Scope

GB/T 19230.2-2003 is the Chinese national standard on test method for evaluating gasoline detergent in use--part 2: test method for demulsibility of gasoline detergent, in the field of petroleum and related technologies. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 1 July 2003 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China, and has been in force since 1 December 2003. Classification: ICS 75.140, CCS E49. 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 Part specifies the test methods and test equipment for the demulsibility performance of gasoline detergents. This Part applies to the evaluation of the demulsibility performance of gasoline detergents.

2 Normative references

The provisions in following documents become the provisions of this Standard through reference in this Standard. For the dated references, the subsequent amendments (excluding corrections) or revisions do not apply to this Standard; however, parties who reach an agreement based on this Standard are encouraged to study if the latest versions of these documents are applicable. For undated references, the latest edition of the referenced document applies.

GB/T 11117.2 Knock test reference fuels - Reference fuel - n-Heptane

3 Terms and definitions

The following terms and definitions apply to this Part.

3.1 Film A thin, translucent layer, which does not stick to the walls of glass cylinders.

3.2 Lace Fibers thicker than fine fragments, OR fibers more than 10% bonded to each other, or both.

3.3 Loose lace or slight scum, or both A rating that more than 10% but less than 50% lace or scum is covering at the gasoline/buffer solution interface, meanwhile the lace or scum does not enter one of the two layers.

3.4 Scum A layer which is thicker than the film, OR a layer that adheres to the walls of the glass cylinder, or both.

3.5 Shred Less than 10% of fine fibers, which are connected to each other.

4 Method overview

At room temperature, put the test gasoline and phosphate buffer solution, into a clean stoppered glass graduated cylinder.

5 Instruments

Stoppered glass graduated cylinder. 100 mL total scale, with 1 mL divisions. The distance from the 100 mL scale line to the mouth of the measuring cylinder is (50 ~ 60) mm.

6 Reagents

6.1 n-heptane. Meet the requirements of GB/T 11117.2 for reference fuel.

6.2 Glass cleaning solution. Non-ionic detergent cleaning solution, if necessary, use chromic acid lotion (strong corrosiveness, harmful to health).

6.3 Distilled water.

6.4 Acetone. Analytically pure (flammable, harmful to health).

6.5 Anhydrous potassium hydrogen phosphate. Analytically pure.

7 Instrument preparation

Wash the graduated cylinder thoroughly before testing. The cleaning process is as follows:

7.1 Rinse the graduated cylinder and stopper with hot tap water. Brush it if necessary. It can also be cleaned by n-heptane. Then rinse with acetone and then tap water.

7.3 Fully dry the graduated cylinder whose liquid has been poured.

8 Preparation of test gasoline

8.1 Sample. Gasoline detergent tested.

8.2 Test gasoline. Base gasoline added to the sample. Prepare at least 100 mL of the test gasoline. Put the test gasoline into a clean container.

9 Test steps

9.1 Pour 20 mL of phosphate buffer solution into a graduated cylinder at room temperature. Record the volume, accurate to 1 mL. Then add 80 mL of test gasoline. Apply a glass stopper.

9.3 Immediately place the graduated cylinder on a non-vibrating platform. Let it stand for 5 min.

9.4 Without picking up the graduated cylinder, observe under natural light and make the following records.