

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

SN/T 0041.4-2011

Replacing SN 0046-1992

**Method for inspection of PONA of naphtha for export. Part 4:
Method for test of naphthenes in saturates fractions with
refractivity intercept**

出口石脑油PONA值检验方法 第4部分：比折光度法测定饱和馏分中的环烷烃
(English Translation)

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Foreword

This section drafted in accordance with GB/T 1.1-2009 given rules.

SN/T 0041 "export naphtha PONA value test method" is divided into four parts.

- Part 1. General procedures;
- Part 2. Gasoline and naphtha depentanizer law;
- Part 3. Determination of Canadian petroleum fraction olefins aromatic content;
- Part 4. off than spectrophotometric determination saturated hydrocarbon fraction naphthenic.

This section SN/T 0041 "export naphtha PONA value test methods" Part 4.

This Part replaces SN 0046-1992 "export naphtha PONA value test method than the saturated hydrocarbon fraction off spectrophotometric measurement loop Alkanes. " the main difference between this part and SN 0046-1992 follows.

- The "Summary of Method" to "Method summary";
- The 6 "measured refractive index must be a pure hydrocarbon original reference check" to "pure hydrocarbons check";
- The 6 "with original baseline calibrated" to "the hydrocarbons, known as the refractive index of the second reference mark Like with. " this section proposed and managed by the National Certification and Accreditation Administration Committee.

1 Scope

This section provides a method for determining the degree of refraction than the saturated hydrocarbon fraction naphthenic content.

This section applies to a distillation end point not exceeding 221 °C, it has depentanizer gasoline or naphtha saturated hydrocarbon fraction.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the edition are not applicable to the present file. For undated references, the latest edition (including any amendments) applies to this document.

SN 0044 export naphtha PONA value test method lower olefin separation of saturated hydrocarbons in naphtha Determination of liquid density and specific gravity SN 0045 export naphtha PONA value test method Lipkin bicapillary Pyknometer

3 Method summary

Measure the saturated hydrocarbon fraction refractive index and density, with the ratio of these two data calculated diopter, together with the density of saturated hydrocarbons isolated in Figure 1 Alkane fraction ring content.

Note: The sample containing polycyclic cycloalkanes, high naphthenic results will measured. Although the reference data corresponding alkane containing bicyclic ring partially corrected, but each containing 1% of bicyclic naphthenes, results will be higher than 1%. Therefore, the end of the distillation, the oil is higher than 163 °C measured ring naphthene content referred equivalents Alkanes.

4 Reagents

4.1

acetone or ether, analytical grade.

4.2

methyl cyclohexane or 2,2,4-trimethyl pentane, AR.

5 Instruments

5.1

refractometer. It needs to be calibrated, and read accurately to five (fourth decimal place) of the sodium D line refractive index at 20 °C.

5.2

circulating water bath. To maintain (20 ± 0.02) °C.

5.3

straw.

6 Test preparation

Refractometer calibration.

Determination of the refractive index must be a pure hydrocarbon check, obtain the correct refractive index. Recommended methylcyclohexane or 2,2,4 Methylpentane. The hydrocarbons, known as the refractive index of the second reference standard used.