

ICS 71.080.15
CCS G 17

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

SH/T 1825-2019

**Industrial carbon nine aromatics
(English Translation)**

Issued on: December 24, 2019

Implemented on: July 1, 2020

Issued by: Ministry of Industry and Information Technology

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009 this standard was proposed by China Petrochemical Corporation this standard is under the jurisdiction of the Petrochemical Subcommittee of the National Chemical Standardization Technical Committee (SAC/TC63/SC4) the main drafting organizations of this standard. China National Petroleum Corporation Dalian Petrochemical Company, China Petroleum & Chemical Corporation Division Shanghai Petrochemical Research Institute, Jiangsu Hualun Chemical Co., Ltd.

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1 Scope

This standard specifies the terms and definitions, product classification, requirements, sampling, inspection rules, signs, labels and Accompanying documents, packaging, transportation and storage this standard is applicable to the aromatic hydrocarbons mainly composed of carbon nine obtained by the process and separation of naphtha through the catalytic reforming process.

Raw material for producing xylene, trimethylbenzene and high boiling point aromatic solvent

2 Normative references

The following documents are indispensable for the application of this document. All dated reference documents. Only dated versions apply to this article.

All reference documents are undated, and the latest version (including all amendments) is applicable to this document GB 190 Packaging Marking of Dangerous Goods
GB/T.2013-2010 Density determination method for liquid petrochemical products GB/T 3723 General Rules for the Safety of Sampling of Industrial Chemical Products GB/T 6283 Determination of moisture content in chemical products Karl Fischer method (general method) GB/T 6678 General Rules for Sampling of Chemical Products GB/T 6680 General Rules for Sampling of Liquid Chemical Products GB/T 8170 Numerical rounding rules and the expression and determination of limit values GB 13690 General Rules for Classification and Hazard Publicity of Chemicals GB 30000.7 Chemical Classification and Labeling Specification Part 7: Flammable Liquid SH/T 0164 Petroleum products packaging, storage, transportation and delivery acceptance rules SH/T 0246 Determination of water content in light petroleum products (electrical method) SH/T 0630 Determination of Bromine Price and Bromine Index of Petroleum Products (Coulometric Method) SH/T 0657 Determination of trace nitrogen in liquid petroleum hydrocarbons Oxidative combustion and chemiluminescence method SH/T 0689 Determination of total sulfur content in light hydrocarbons, motor fuels and other oils (ultraviolet fluorescence method) SH/T 1147 Determination of Trace Sulfur in Industrial Aromatic Hydrocarbons Microcoulometric Method SH/T 1551 Determination of Bromine Index of Industrial Aromatic Hydrocarbons by Coulometric Titration SH/T 1757 Determination of organic chlorine in industrial aromatic hydrocarbons Microcoulometric method SH/T 1767 Determination of Bromine Index of Industrial Aromatic Hydrocarbons by Potentiometric Titration SH/T 1820 Industrial aromatic hydrocarbons. Determination of trace sulfur. Ultraviolet fluorescence method SH/T 1821 Determination of trace nitrogen in industrial aromatics by chemiluminescence method

3 Terms and definitions

The following terms and definitions apply to this document

4 Product Categories

The products are divided into type I, type II and type III according to different purposes. They are used for the production of xylene, trimethylbenzene and high-boiling aromatic solvents.

5 Requirements

The technical requirements and test methods of industrial C9 aromatic hydrocarbons should meet the requirements of Table 1.

6 Sampling

According to the safety and technical requirements specified in GB/T 3723, GB/T 6678 and GB/T 6680, the sampling volume should meet the requirements of inspection and sample retention

7.1 Inspection items and inspection classification

All items specified in Table 1 of this standard are ex-factory inspection items

7.2 Group batch

The same quality and uniform products are a batch, which can be batched according to the production cycle, production shift or product storage tank

7.3 Judgment rules

The test results are determined according to the rounding value comparison method specified in GB/T 8170. The test results are all in line with the technology in Table 1 of this standard.

When requested, the batch of products will be judged to be qualified

7.4 Re-inspection rules

If one of the test results does not meet the requirements of this standard, it should be in accordance with GB/T 3723, GB/T 6678 and GB/T 6680.

If the re-inspection result still does not meet the requirements of this standard, the batch of products will be judged to be unqualified.

8.1 Marks and labels

C9 aromatic hydrocarbons for industrial use are flammable liquids. Please refer to Appendix B for relevant safety information. The hazard signs are in accordance with GB 13690,

8.2 Accompanying documents

Each batch of factory products should be accompanied by a quality certificate, which includes. manufacturer name, product name, grade, batch number or production date Period, inspection results and number of this standard, etc.

9 Packaging, transportation and storage

Packing, transportation, storage and delivery acceptance shall be carried out in accordance with SH/T 0164 Appendix A (Normative appendix) Industrial carbon nine aromatic hydrocarbons. Determination of hydrocarbon components. Gas chromatographic method A.1 Scope this appendix specifies the gas chromatography method for the determination of total aromatics, non-aromatics after toluene, carbon eight aromatics, trimethylbenzene, and indene in industrial carbon nine the content of manganese, naphthalene and above this appendix is applicable to the determination of components with a content of not less than 0.001% (mass fraction) of C9 aromatic hydrocarbons for industrial use A.2 Method summary Under the specified test conditions, an appropriate amount of sample is injected into a gas chromatograph equipped with a flame ionization detector (FID).

The column is effectively separated, the peak area is measured, and the content of each component is calculated by the effective carbon number correction area normalization method A.3 Reagents and materials A.3.1 Carrier gas. Nitrogen, with a purity of not less than 99.99% (volume fraction) A.3.2 Combustion gas. hydrogen, the purity is not less than 99.99% (volume fraction) A.3.3 Auxiliary gas. Nitrogen, the purity is not less than 99.99% (volume fraction) A.3.4 Auxiliary gas. air, no oil, fully dried and purified A.3.5 Standard reagents A. 3.5.1 n-heptane. the purity should not be less than 99.0% (mass fraction) A. 3.5.2 Benzene. The purity should not be less than 99.0% (mass fraction) A. 3.5.3 Toluene. the purity should not be less than 99.0% (mass fraction) A. 3.5.4 Decahydronaphthalene. The purity should not be less than 99.0% (mass fraction) A. 3.5.5 Para-xylene. The purity should not be less than 99.0% (mass fraction) A.3.5.6 Cumene. The purity should not be less than 99.0% (mass fraction) A. 3.5.7 N-Propylbenzene. The purity should not be less than 99.0% (mass fraction) A. 3.5.8 1-Methyl-4-ethylbenzene. The purity should not be less than 97.0% (mass fraction) A. 3.5.9 1-Methyl-3-ethylbenzene. The purity should not be less than 97.0% (mass fraction) A.3.5.10 1-methyl-2-ethylbenzene. The purity should not be less than 99.0% (mass fraction) A.3.5.11 1,2,3-Trimethylbenzene...