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

GB/T 3405-2025

Replacing GB/T 3405-2011

Petroleum benzene

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting.

This document replaces GB/T 3405-2011 "Petroleum Benzene". Compared with GB/T 3405-2011, except for structural adjustments and editorial changes, In addition, the main technical changes are as follows.

- a) The scope has been changed (see Chapter 1, Chapter 1 of the 2011 edition);
- b) The test methods for purity, toluene, non-aromatic hydrocarbons and 1,4-dioxane have been changed (see Table 1, Table 1 of the 2011 edition);
- c) The color test method and arbitration test method have been changed (see Table 1, Table 1 of the 2011 edition);
- d) The quality index of petroleum benzene-535 thiophene was changed from "report" to " $\leq 1.0\text{mg/kg}$ ", and the test method of petroleum benzene-535 thiophene content was changed.

Methods (see Table 1, Table 1 of the 2011 edition);

- e) Added the bromine index quality index of petroleum benzene-535 (see Table 1);
- f) "Total sulfur content" was changed to "sulfur content", and the test method and arbitration method were changed (see Table 1, Table 1 of the 2011 edition);
- g) The test method for nitrogen content has been changed (see Table 1, Table 1 of the 2011 edition);
- h) The test method for water content has been changed (see Table 1, Table 1 of the 2011 edition);
- i) Added the quality index and test method of chlorine content (see Table 1);
- j) Changes have been made to marking, packaging, storage, transportation and delivery acceptance (see Chapter 7, Chapter 6 of the 2011 edition);

- k) Safety has been modified (see Chapter 8, Chapter 7 of the 2011 edition);
- l) The determination method for trace thiophene in petroleum benzene has been changed (see Appendix A, Appendix A of the 2011 edition).

This document is proposed and coordinated by the National Technical Committee for Standardization of Petroleum Products and Lubricants (SAC/TC280).

Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents.

This document was drafted by: China National Petroleum Corporation Fushun Petrochemical Company, China Petrochemical Shanghai Petrochemical Company Company, PetroChina Petrochemical Research Institute, Sinopec Petrochemical Research Institute Co., Ltd., Sinopec (Shanghai) Petrochemical Research Institute Co., Ltd., China National Petroleum Corporation Urumqi Petrochemical Branch, China National Petroleum Corporation Lanzhou Petrochemical Company, China National Petroleum Corporation Jilin Petrochemical Company, Hengli Petrochemical (Dalian) Refining and Chemical Company Limited company.

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This document was first issued in 1982, revised for the first time in 2011, and this is the second revision. Petroleum Benzene Warning---If appropriate precautions are not taken, the products covered by this document may be dangerous during production, storage, transportation and use.

This document does not purport to provide advice on all safety issues associated with this product. It is the user's responsibility to adopt appropriate safety and health precautions. and ensure that the conditions stipulated by relevant national laws and regulations are met.

1 Scope

This document specifies the product classification, technical requirements and test methods, inspection rules, marking, packaging, storage and transportation, delivery acceptance and Safety.

This document is applicable to the production of crude oil and its derivatives by catalytic reforming, ethylene cracking by-product aromatics, toluene disproportionation and other processes.

Petroleum benzene produced as a raw material for organic synthesis or other chemical industries.

2 Normative references

GB/T 511

GB/T 1816

GB/T 2012

GB/T 2013

GB/T 3143

GB/T 3145

GB/T 4756

GB/T 6324.6

GB/T 6324.8

GB 13690

GB 30000.7

GB 30000.18

GB/T 40111