

ICS 71.080

CCS G 18



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

GB/T 47272-2026

**Coal tar - Determination of the content of saturates, aromatics,
heteroatomics, phenols, resins and asphaltenes - Solvent
extraction and column chromatography gravimetric method**

煤焦油 饱和分、芳香分、杂原子、酚类、胶质和沥青质含量的测定 溶剂萃取-柱
层析分离重量法

Issued on: March 31, 2026

Implemented on: October 1, 2026

**Issued by: State Administration for Market Regulation;
Standardization Administration of the PRC**

Table of Contents

- 1 Scope
- 2 Normative references
- 3 Terms and Definitions

Foreword

This document is in accordance with GB/T 1.1-2020 "Standardization Work Guidelines Part

1. Structure and Drafting Rules of Standardization Documents". Drafting is scheduled. Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents. This document was proposed by the China Iron and Steel Association. This document is under the jurisdiction of the National Technical Committee on Standardization of Coal Chemical Industry (SAC/TC469). This document was drafted by: Xijing University, Northwest University, Metallurgical Industry Information and Standardization Research Institute, Ningxia Xitai Coal Chemical Co., Ltd., and Liaoning Province. University of Science and Technology. The main drafters of this document are: Yao Qiuxiang, Sun Ming, Bai Jinfeng, Wang Xiaoyuan, An Weiwei, and Li Chao. Saturated components, aromatic components, heteroatoms in coal tar Determination of phenolic, resinous and asphaltenes content Solvent extraction-column chromatography gravimetric method Warning

---Personnel using this document should have practical experience in formal laboratory work. The use of this document may involve certain hazardous activities. This document does not address all potential safety issues related to the materials, equipment, and operations used. Users are responsible for taking appropriate safety and health precautions. Implement the measures and ensure they comply with relevant national laws and regulations.

1 Scope

GB/T 47272-2026 is the Chinese national standard covering separating coal tar into its fractions - the classical solvent and column separation that tells a processor what is actually in the tar and therefore what can be recovered from it. First edition, in force since 1 October 2026. It was issued on 31 March 2026 and takes effect on 1 October 2026, as a first edition. The document is under the responsibility of the Standardization Administration of China. This page is published from the official record of the 2026 edition; the clause text of a standard this recent is not yet in circulation, and the figures, limits and tables it contains are those of the document itself, delivered in full with the English translation.

This document describes a method for determining the content of saturated fractions, aromatic fractions, heteroatoms, phenols, gums, and asphaltenes in coal tar. This document applies to the analysis of saturated components, aromatic components, heteroatoms, and phenols in low-temperature, medium-low-temperature, medium-temperature, and high-temperature coal tar. Determination of the content of colloids, resins, and asphaltenes. For reference in the study of coal extracts, crude oil, direct/indirect coal liquefaction oil, and biomass pyrolysis oil.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included. For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies. This document.

GB/T 1999 Sampling Method for Coking Oil Products

GB/T 2288 Method for Determination of Moisture Content in Coking Products

GB/T 8170 Rules for rounding off numerical values and the representation and determination of limiting values

3 Terms and Definitions

The following terms and definitions apply to this document.

3.1 saturates Nonpolar, saturated hydrocarbon components.

Note. This mainly includes hydrocarbons such as alkanes and cycloalkanes that do not contain aromatic rings or double bonds.

3.2 Aromatics Aromatic compounds containing one or more benzene ring structures.

3.3 heteroatomics In addition to carbon, hydrogen, and phenols, it also contains other atoms (such as oxygen, nitrogen, sulfur, etc.) and these atoms are located in the framework or rings of the molecular structure. Compound.

3.4 phenols A class of compounds formed by the combination of one or more aromatic rings with one or more hydroxyl groups.