

ICS 73.040

CCS D 26



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

GB/T 46289-2025

Macrolithotype classification for brown coals and lignites

褐煤宏观岩石类型分类

Issued on: October 5, 2025

Implemented on: May 1, 2026

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

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part

1.Structure and Drafting Rules of Standardization Documents". Drafting. 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 National Coal Association. This document is under the jurisdiction of the National Coal Standardization Technical Committee (SAC/TC42). This document was drafted by: China University of Mining and Technology (Beijing), China Coal Technology & Engineering Group Xi'an Research Institute Co., Ltd., and Jiangsu Geological and Mineral Resources Design Institute. Research Institute. The main drafters of this document are. Tang Yuegang, Wang Shaoqing, Xiao Wenzhao, Zhang Qun, Zhang Guchun, and Zhu Shifei. Macroscopic rock type classification of lignite

1 Scope

GB/T 46289-2025 is the Chinese national standard covering classifying lignite by what the eye sees on a fresh face - the banding and the lustre, the woody, earthy and fibrous types, and the criteria that make the description repeatable between two geologists at the same seam. First edition, with the maceral classification GB/T 46288-2025. In force from 1 May 2026. Issued on 5 October 2025, it has been in force since 1 May 2026.

This document specifies the classification criteria, classification scheme, and classification method for lignite rock types. This document applies to the description, resource evaluation, processing and utilization, and genetic study of No. 1 lignite.

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 12937 Coal and Petrology Terminology

3 Terms and Definitions

The terms and definitions defined in GB/T 12937 and the following terms and definitions apply to this document.

3.1 Lignite rock composition lithotype The basic building blocks of lignite that are visible to the naked eye.

Note. It is divided into four types of coal and petrographic components. clastic coal, woody coal, wood fiber charcoal, and minerals.

3.2 Atritus (or atritus) It is composed mainly of humic debris and has a clastic structure, making it a type of lignite rock.

3.3 Wood coal xylite It is composed of lignite rock with a coal-like, wood-like structure.

3.4 Charcoal The lignite rock, formed from wood through carbonization, exhibits a silky luster and fibrous structure.

3.5 mineral matter The inorganic components in lignite that are visible to the naked eye are distributed in the form of fragments, nodules, inclusions, and bands.

3.6 macrolithotype Typical symbiotic combinations of lignite rock components reflect its genesis and technological properties.

3.7 Rich coal Lignite with a content of more than 10% fragmented coal, less than 10% lignocellulosic coal, less than 10% mineral content, and less than 10% wood fiber charcoal content. Macroscopic rock types.