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**Determination of oxygenates in alcohols/ethers-based
aromatics-Gas chromatographic method**

醇醚基芳烃中含氧化合物的测定 气相色谱法

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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.

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.

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This document was drafted by: Huadian Electric Power Research Institute Co., Ltd., Huadian Coal Group Co., Ltd., Tsinghua University, Shanxi Provincial Inspection and Quarantine Bureau Testing Center, Ningxia Coal Industry Co., Ltd. of China National Energy Group, Shanghai Yankuang Energy Technology Research and Development Co., Ltd., Inner Mongolia Jiutai Xinyuan New Materials Materials Co., Ltd. and Inner Mongolia Yitai Coal Co., Ltd.

The main drafters of this document are: Huang Xiaofan, Tang Xiaoping, Wang Ziyao, Zhang Bo, Qian Weizhong, Zhi Hongmei, Chen Jun, Sun Qiwen, Cui Yu, Wang Tong, Cui Chaojie, Liu Hui, Li Yanru, Zhang Xiangyu, Li Shengsheng, Chen Angjun, Wang Jian, Zheng Hongfeng.

Determination of oxygenated compounds in alcohol ether aromatics Gas chromatography

1 Scope

This document describes a method for determining oxygenated compounds in alcohol ether aromatics by gas chromatography. The components determined in this document include.

Ether, acetaldehyde, propionaldehyde, isobutyraldehyde, butyraldehyde, valeraldehyde, isopropanol, n-propanol, isobutanol, tert-butanol, n-butanol, acetone, butanone. Various oxygen-containing The determination range of the compound is 1mg/kg~200mg/kg.

Dimethyl ether, methyl tert-butyl ether (MTBE), ethyl tert-butyl ether (ETBE), diisopropyl ether (DIPE), tert-amyl methyl ether The determination of (TAME), propyl ether, methanol, ethanol and allyl alcohol components can be carried out for reference.

This document applies to the determination of oxygen-containing compounds in alcohol ether aromatic products.

2 Normative references

GB/T 4756

GB/T 4946

3 Terms and definitions

The terms and definitions defined in GB/T 4946 and the following apply to this document.

3.1 alcohols/ethers-basedaromatics

Aromatic products produced using alcohols, ethers or their mixtures as raw materials.

[Source. GB/T 37176-2018, 3.1]

4 Principle

Using nitrogen as carrier gas, the sample was injected into a gas chromatograph equipped with two large-diameter capillary columns. Column 1 was a pre-cut column used to extract the sample from the system.

The chromatographic column 2 is used as a separation column to separate and analyze oxygen-containing compounds.

After the components to be tested are eluted from the pre-cut column, the pre-cut column is backwashed, and the components to be tested enter the separation column for separation. The eluted compounds are passed through a hydrogen flame.

The samples were detected by FID and quantified by external standard method.

5.1 Materials

5.1.1 Hydrogen. purity (volume fraction) not less than 99.99%.

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