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Method for determination of trace elements in attapulgite

凹凸棒石微量元素测定方法

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Foreword

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This document was drafted by: Lanzhou Institute of Chemical Physics, Chinese Academy of Sciences, Linze County Attapulgit Industry Development Center, Mingguang City Mingyaoao Vermiculite Industrial Technology Co., Ltd., Xianyang Nonmetallic Mineral Research and Design Institute Co., Ltd., Jiangsu Shenlite Biotechnology Co., Ltd., Lanzhou City College, Anhui Jiaheng New Materials Technology Co., Ltd., Jining Normal University, Heilongjiang Fifth Geological Exploration Institute, Gansu Huilin Industrial Development Co., Ltd., Xuyi County Sinoma Attapulgit Clay Co., Ltd., Mudanjiang Medical University, China Building Materials Industrial Geological Exploration Center, China Shaanxi General Team of Building Materials Industrial Geological Exploration Center, China National Testing and Inspection Holding Group Xianyang Co., Ltd., China Geological Survey Xi'an Geological Survey Center (Northwest Geological Science and Technology Innovation Center).

The main drafters of this document are: Wang Aiqin, Liu Jun, Xu Fan, Zhang Honglin, Ouyang Zhengjian, Huang Zhengjun, An Junwei, Sha Zhuang, Zhang Jianhu, Wu Xichun,

Zhou Wei, Zheng Changwen, Wang Jinbao, Xu Hongna, Li Xin, Duan Yaping, Li Weiliang, Kang Yuru, Yan Shun, Dong Xiao, Hou Caihong, Wang Zifan, Meng Xiangfeng, Zeng Hanhui, Lu Guanghui, Yang Xiangnong, and Zhang Zhen.

Determination Method of Trace Elements in Attapulgitic Warning---People who use this document should have relevant professional knowledge and practical experience in formal laboratory work. This document does not indicate The user is responsible for taking appropriate safety, health and environmental measures and ensuring compliance with relevant national laws and regulations. Laws and regulations.

1 Scope

This document describes the sample preparation, inductively coupled plasma atomic emission spectrometry (ICP-AES) and the method for the determination of trace elements in attapulgitic.

OES), inductively coupled plasma mass spectrometry (ICP-MS) and atomic fluorescence spectroscopy (AFS).

This document applies to barium, beryllium, cadmium, cobalt, chromium, copper, manganese, molybdenum, nickel, lead, tin, strontium, vanadium, zinc, arsenic, mercury, Determination of 18 trace elements including antimony and selenium. Other elements can be used after verification.

2 Normative references

GB/T 602

GB/T 6682

GB/T 8170

3 Terms and definitions

The following terms and definitions apply to this document.

3.1

In addition to the main skeleton elements of attapulgitic, silicon, magnesium, aluminum, and iron, it also contains barium, beryllium, cadmium, cobalt, chromium, copper, manganese, molybdenum, nickel, lead, tin, strontium, vanadium, 18 elements including zinc, arsenic, mercury, antimony and selenium.

4 Sample preparation

Grind the sample until it passes through a 74 μm standard sieve, dry it in an oven at 105°C

~ 110°C for 2 h, and place it in a desiccator for later use.

Note. Samples for determination of arsenic, mercury, selenium and antimony should be dried at 45°C±5°C.

5.1 Scope of application

It is suitable for testing the contents of 11 trace elements including barium, cobalt, chromium, copper, manganese, nickel, lead, tin, strontium, vanadium and zinc in attapulgite.