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GB/T 11064.1-2024

Replacing GB/T 11064.1-2013

Methods for chemical analysis of lithium carbonate, lithium hydroxide monohydrate and lithium chloride - Part 1: Determination of lithium carbonate content - Titration

碳酸锂、单水氢氧化锂、氯化锂化学分析方法 第 1 部分：碳酸锂含量的测定 滴定法

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Foreword

This document was drafted in accordance with the provisions of GB/T 1.1-2020 "*Directives for standardization - Part 1: Rules for the structure and drafting of standardizing documents*".

This document is Part 1 of GB/T 11064 "*Methods for chemical analysis of lithium carbonate, lithium hydroxide monohydrate and lithium chloride*". GB/T 11064 has published the following parts:

- Part 1: Determination of lithium carbonate content - Titration;
- Part 2: Determination of lithium hydroxide content - Acid-alkali titrimetric method;
- Part 3: Determination of lithium chloride content - Potentiometric method;
- Part 4: Determination of potassium and sodium content - Flame atomic absorption spectrometric method;
- Part 5: Determination of calcium content - Flame atomic absorption spectrometric method;
- Part 6: Determination of magnesium content - Flame atomic absorption spectrometric method;
- Part 7: Determination of iron content - 1,10-phenanthroline spectrophotometric method;
- Part 8: Determination of silicon content - Molybdenum blue spectrophotometric method;
- Part 9: Determination of sulfate content - Barium sulfate turbidity method;
- Part 10: Determination of chloride content - Silver chloride nephelometry method;
- Part 11: Determination of acid-insolubles content - Gravimetric method;
- Part 12: Determination of carbonate content - Acid-alkali titrimetric method;
- Part 13: Determination of aluminum content - Chromazurol S-cetylpyridinium bromide spectrophotometric method;
- Part 14: Determination of arsenic content - Molybdenum blue spectrophotometric method;
- Part 15: Determination of fluoride content - Ion selective method;

- Part 16: Determination of calcium, magnesium, copper, lead, zinc, nickel, manganese, cadmium, aluminum, iron and sulfate contents - Inductively coupled plasma atomic emission spectrometry.

This document replaces GB/T 11064.1-2013 "*Methods for chemical analysis of lithium carbonate, lithium hydroxide monohydrate and lithium chloride - Part 1: Determination of lithium carbonate content - Acid-alkali titrimetric method*". Compared with GB/T 11064.1-2013, in addition to structural adjustments and editorial changes, the main technical changes are as follows:

a) MODIFY the concentration of hydrochloric acid standard titration solution (see 4.2.3 of this document, 3.2.1 of the 2013 edition);

b) MODIFY the relevant content of "weighing mass" (see 4.5 of this document, 5.1 of the 2013 edition);

c) ADD the relevant content of "blank test" (see 4.5.3 of this document);

d) MODIFY the relevant content of "test data processing" (see 4.6 of this document, Clause 6 of the 2013 edition);

e) DELETE the relevant content of "allowable difference" (see 7.2 of the 2013 edition);

f) ADD the reproducibility clause (see 4.7.2 of this document);

g) ADD the potentiometric method (see Clause 5 of this document).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. The issuing authority of this document shall not be held responsible for identifying any or all such patent rights.

This document was proposed by China Nonferrous Metals Industry Association.

This document shall be under the jurisdiction of National Technical Committee on Nonferrous Metals of Standardization Administration of China (SAC/TC 243).

Drafting organizations of this document: Jiangxi Ganfeng Lithium Industry Group Co., Ltd., Yichun Tianzhuo New Materials Co., Ltd., Yichun Yinli New Energy Co., Ltd., Shandong Ruifu Lithium Industry Co., Ltd., Tianqi Lithium New Energy Materials (Suzhou) Co., Ltd., Yahua Lithium Industry (Ya'an) Co., Ltd., Center for Industrial Analysis and Testing of Guangdong Academy of Sciences, Swiss Metrohm China Co., Ltd., Jiangxi Yongxing Special Steel New Energy Technology Co., Ltd., GEM (Wuxi) Energy Materials Co., Ltd., Xinjiang Nonferrous Metals Research Institute Co., Ltd., Guangdong Brunp Recycling Technology Co., Ltd., Jiangsu Ronghui General Lithium Co., Ltd., Tangshan Xinfeng Lithium Co., Ltd., Zhejiang Huayou Cobalt Co., Ltd., Chengdu Chemphys High Energy Chemical Industry Co., Ltd., Chengxin Lithium Group Co., Ltd., Jiangxi Dongpeng New Material Co., Ltd., Guobiao (Beijing) Testing

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Main drafters of this document: Li Qiang, Zhao Wentao, Zhou Jiahong, Wu Jinfang, Xiong Xiaoyan, Liu Binhua, Huang Yanjun, Kang Rujin, Zhang Jun, Zhao Jiang, Liu Shanshan, Chen Yujun, Wang Yongsheng, Xie Tangfeng, Yang Lei, Wen Guangxue, Xu Jianqing, Cai Rongfu, Wu Xuefeng, Peng Wenxiu, Zhang Yuxin, Dai Zehua, Wu Ling, Deng Hongyun, Yang Huilin, Yao Li, Weina, Dai Xiaoyong, Xie Hui, Xu Hua.

This document was first issued in 1989 and revised for the first time in 2013. This is the second revision.