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

GB/T 15057.1-1994

**Limestone for chemical industry--Methods of sampling and
preparing**

化工用石灰石采样与样品制备方法

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Foreword

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Chemical Analysis of Limestone for Chemical Industry

2 Normative References

GB/T 4650 Chemical products for industrial use - Sampling - Vocabulary

GB/T 6678 General Principles for Sampling Chemical Products

3 Sampling Method 3.1 Sampling of mine pile

The sampling point shall be no less than 0.3m from the top and from the bottom, and no less than 0.2m from the surface. The sample quantity at each point collected in the same batch shall be similar.

3.1.1 Ore of less than 1000t The sampling amount shall be no less than 2/100,000. The row spacing and point spacing shall be no greater than 2.5m, which shall be evenly distributed on the surface of the ore pile. Sample shall be taken at the intersection of row spacing and point spacing.

3.1.2 Ore of greater than 1000t The sampling amount shall be no less than 1/100,000. The row spacing and point spacing shall be no greater than 3.5m; and shall be evenly distributed on the surface of the ore pile. Sample shall be taken at the intersection of the row spacing and the point spacing.

6 The sampling amount shall be no less than 2/100,000. The row spacing and point spacing shall be no greater than 1.5m, and shall be evenly distributed on the surface of the ore in the cabin. Sample shall be taken at the intersection of the row spacing and the point spacing.

3.3.2 Ship of greater than 1000t The sampling amount shall be no less than 1/100,000. The

row spacing and point spacing shall be no greater than 2.0m, and shall be evenly distributed on the surface of the ore in the cabin. Sample shall be taken at the intersection of the row spacing and the point spacing.

3.4 Belt conveyor sampling Sample quantity taken from the same batch shall be similar.

3.4.1 Sampling is conducted once every hour; and the sampling amount is 2/100,000 of the throughput of the belt conveyor per hour.

3.4.2 The sampling position can be carried out at any section of the belt conveyor. Each time, 3-point samples are continuously and randomly taken from the cross-section of the belt conveyor.

3.4.3 For ores with a transportation volume of less than 4 h, the number of sampling times from the cross-section of the belt conveyor shall be no less than 6 times; and for ores with a transportation volume of less than 2 h, the number of sampling times shall be no less than 4 times.

4 Preparation of Sample 4.1 Mixing each sample in a batch constitutes the sample of that batch.

4.2 The mixed sample needs to undergo procedures such as smashing, crushing, and grinding. Each procedure shall be screened. Mix well and divide into quarters. Each reduction shall be carried out as follows: Where: Q - the minimum reliable mass of the reduced sample, in kg, d - maximum diameter of sample particles, in mm, K - uniformity coefficient of ore, limestone is 0.1.

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Limestone for Chemical Industry - Methods of Sampling and Preparing 1 Subject Content and Scope

This Standard specifies the sampling and sample preparation methods for limestone used in chemical industry. This Standard applies to the collection and preparation of limestone analysis specimens for chemical industry.