

HG

CHEMICAL INDUSTRY STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

HG/T 2976-2011

Replacing HG/T 2976-1999

Fertilizer catalysts - Determination of attrition rate

化肥催化剂磨耗率的测定

(English Translation)

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Table of Contents

Foreword	3
1 Scope	4
2 Normative references	4
3 Principle	4
4 Instrument	4
5 Sampling	5
6 Measurement steps	5
7 Result calculation	5

Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009.

This standard replaces HG/T 2976-1999 "Test method for attrition and abrasion of fertilizer catalysts". Compared with HG/T 2976-1999, the main technical changes are as follows, except for editorial changes.

- DELETE the balance and micro-printer configured for the attrition meter (4.3 ~ 4.4 of the 1999 edition);
- MODIFY the drying temperature of sample preparation (see 5.2; 5.2 of the 1999 edition).

This standard refers to ASTM D 4058-1996 "Standard test method for attrition and abrasion of catalysts and catalyst carriers".

1 Scope

This standard specifies the instrument, sampling, measurement steps, result calculation for the determination of the attrition rate of fertilizer catalysts.

This standard is applicable to the determination of the attrition rate of cylindrical, strip, amorphous, annular, spherical fertilizer catalysts.

2 Normative references

The following documents are essential to the application of this document. For the dated documents, only the versions with the dates indicated are applicable to this document; for the undated documents, only the latest version (including all the amendments) is applicable to this standard.

GB/T 6003.1 Test sieves of metal wire cloth

GB/T 6678 General principles for sampling chemical products

3 Principle

Place a certain mass of processed specimen in the grinding cylinder of the abrasion tester. After rotating at a certain speed for a certain period of time, the sample is worn to produce particles. The results of the abrasion rate measurement are calculated, after sieving and weighing.

4 Instrument

Main parameters of the abrasion tester (equipped with a mechanical sieving instrument).

- Inner diameter of grinding cylinder. $\Phi 120$ mm;
- Length of grinding cylinder. 150 mm;
- Inner baffle of grinding cylinder. 1 piece, 150 mm long, 18 mm high;
- Grinding cylinder speed. 60 r/min;
- Grinding time. 30 min.