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

GB 22174-2008

diniconazole wettable power

烯唑醇可湿性粉剂

(English Translation)

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Foreword

This standard Chapters 3 and 5 are mandatory, the rest are recommended.

The standard proposed by China Petroleum and Chemical Industry Association.

This standard by the National Standardization Technical Committee on Pesticides (CSBTS/T C133) centralized.

1 Scope

This standard specifies the diniconazole WP requirements, test methods and marking, labeling, packaging and storage.

This standard applies to the processing by the diniconazole original drug with suitable additives and fillers into diniconazole WP.

2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to

the agreement are based on research Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

Representation GB/T 1250 limit values and the method of determining GB/T 1600
Determination of Water Pesticides Determination of GB/T 1601 Pesticides pH value GB/T
1604 Goods pesticide regulations for acceptance GB/T 1605 sampling commercial
pesticides GB 3796 pesticide packaging General GB/T 5451 WP Pesticide wettability
measurement method GB/T 14825 method for determination of pesticide suspension agent
GB/T 16150 pesticide powder, wettable powder fineness measurement method GB/T
19136 Determination of Pesticide Thermal storage stability

3 Requirements

3.1

Composition and appearance. This product should be in line with the original drug diniconazole standard with suitable additives and fillers processed into for loose uniform composition Powder, there should be no lumps.

3.2

diniconazole WP should meet the requirements of Table 1.

Table 1 diniconazole WP Control Project Index

Item Index

Diniconazole mass fraction /% 12.5 ± 0.7 Diniconazole suspension rate /% ≥ 70 pH range of 7.0 to 11.0 Moisture /% ≤ 3.0 Wetting time/s ≤ 90 Fineness (through 45 μ m test sieve) /% ≥ 95 Thermal storage stability of a qualified a thermal storage stability test, test at least once every 3 months.

Test Method 4

4.1 Sampling

Carried out according to GB/T 1605 "solid preparation sampling" method. Determining sample package by random sampling method, the final sample size should not be Less than 300g.

4.2 Identification Test

HPLC --- The identification test with diniconazole determination simultaneously. Under the same chromatographic operating conditions, the sample One solution peak retention time compared with standard sample solution diniconazole chromatographic retention time, the relative difference should be less than 1.5%.

When using the above method for identification of effective ingredients have questions,

other effective methods can be used for identification.

4.3.1 Method summary

Sample dissolved in mobile phase, methanol + water as the mobile phase, use as filler to C18 stainless steel column and UV detector (250nm), Other than the standard method of sample diniconazole reverse phase HPLC separation and determination.

4.3.2 Reagents and solutions

Methanol. HPLC grade;

Water. The new secondary steam distilled water;

Diniconazole standards. a known mass fraction $\geq 99.0\%$.

4.3.3 Instruments

High performance liquid chromatography. a variable wavelength UV detector;

Chromatographic data processor or chromatography workstation;

Column. 250mm x 4.6mm (i.d) stainless steel column, built ZORBAXSB-C18, 5 μ m filler (or other equivalent effect Column);

Filter. pore size of about 0.45 μ m;

Micro injector. 50 μ L;

Ultrasonic cleaner.

4.3.4 HPLC operating conditions

Mobile phase. psi (methanol. water) = 85.15, by membrane filtration, and degassing;

The mobile phase flow rate. 1.0mL/min;

Column temperature. room temperature (temperature change should not exceed 2 °C);

Detection wavelength. 250nm;

Injection volume. 5 μ L;

Retention time. Diniconazole about 5.6min, diniconazole isomers about 4.5min.

It said operating parameters are typical, according to the characteristics of different instruments and columns for a given operating parameters adjusted as appropriate, in order to obtain the most Good effect. Typical diniconazole WP HPLC is shown in Figure 1.

1 --- Diniconazole isomer;

2 --- diniconazole.

Figure 1 diniconazole WP HPLC chromatogram

4.3.5.1 Sample solution preparation

Weigh diniconazole standards 0.05g (accurate to 0.0002g), placed in 100mL volumetric flask, dissolved in mobile phase and dilute to the mark, Shake well.

4.3.5.2 Sample solution preparation

Weigh the sample containing diniconazole 0.05g of (accurate to 0.0002g), placed in 100mL volumetric flask, dissolved in mobile phase and dilute to Mark and shake. Through 0.45μm membrane filter and set aside.

4.3.5.3 Determination

Under these operating conditions, after the instrument is stable, continuous injection of several doses of the standard solution until the two adjacent needles diniconazole peak area relative change After less than 1.5%, according to the solution, sample solution, sample solution, standard order of standard solution was measured.

4.3.6 Calculation

Before and after the two-pin solution and the sample solution in the sample measured two doses of the standard solution diniconazole peak areas are averaged. Sample ene YI alcohol content of 1 (%) according to equation (1).

$$1 = A2$$

Where.

Two doses of the standard solution A1 --- alcohol before and after diniconazole mean peak area;

Sample solution before and after the two-pin A2 --- diniconazole mean ol peak area;

--- Standard Diniconazole mass fraction, expressed as a percentage.

4.3.7 Allowable difference

The difference between two parallel determination results shall not be greater than 0.5%, the arithmetic mean value as a measurement result.

4.4.1 Measuring step

According to GB/T 14825 in a method carried out. He said sample of about 1.0g (accurate to 0.0002g), with the amount of 70mL of methanol will remain in the bucket 1/10 suspensions and the residue is transferred to the bottom of the 100mL flask, thoroughly