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Pyrimethanil technical material

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(English Translation)

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5.1 Marking, labeling, packaging
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Foreword

This standard in Chapter 3, Section 5 is mandatory, the rest are recommended.

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

Please note that some of the content of this document may involve patents, the issuing authority of this document does not assume responsibility for identifying these patents.

The standard proposed by China Petroleum and Chemical Industry Federation.

This standard by the National Pesticide Standardization Technical Committee (SAC/TC133).

This standard is drafted. Shenyang Chemical Research Institute Co., Ltd.

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1 Scope

This standard specifies the requirements pyrimethanil original drug, Test Method for marking, labeling, packaging, storage, and acceptance period.

This standard applies to impurities derived from the production of pyrimethanil and composition pyrimethanil original drug.

Note: Other names, structural formulas and physicochemical parameters of the basic pyrimethanil see Appendix A.

2 Normative references

The following documents for the application of this document is essential. For dated references, only applies to the version dated paper Pieces. For undated references, the latest edition (including any amendments) applies to this document.

GB/T 1600 Pesticide Method Moisture Determination 1601 pH value pesticides GB/T GB/T 1604 pesticide regulations for acceptance of goods GB/T 1605-2001 sampling commercial pesticides GB 3796 pesticide packaging General GB/T 6682-2008 analytical laboratory use specifications and test methods (ISO 3696. 1987, MOD) GB/T 8170-2008 rounding off means about rules and determining limiting values GB/T 19138 Determination of acetone insoluble pesticide

3.1 Appearance

White powder solid, without visible foreign matter and added modifier.

3.2 Technical Specifications

Pyrimethanil original drug should also meet the requirements of Table 1.

Table 1 pyrimethanil original drug control project indicators

Item Index

Pyrimethanil mass fraction /% ≥ 97.0 Acetone insolubles a /% ≤ 0.2 Moisture /% ≤ 0.5 pH range 6.0 to 10.0 when a normal production, the acetone insoluble matter measured at least once every three months.

Test Method 4

Safety Tips. to use this standard shall have practical experience of laboratory work. This standard does not indicate any safety issues. Make with those who have the responsibility to take appropriate safety and health practices and to ensure compliance with the provisions of relevant state laws and regulations.

4.1 General provisions

This standard reagent in the absence of water and other requirements stated, refer to three predetermined analytical reagents and GB/T 6682-2008 of water. The test results performed by determining 4.3.3 rounding value in comparison 8170-2008 GB/T .

4.2 Sampling

Carried out in GB/T 1605-2001 of "original drug product sampling" approach. Determined by sampling a random number table method packages, the amount of the final sample not less than 100g.

4.3 Identification Test

Infrared spectroscopy --- Sample Sample pyrimethanil IR in the range of 4000cm⁻¹ ~ 400cm⁻¹ absorption spectrum should be no significant difference. Pyrimethanil standard infrared spectra of Figure 1.

HPLC --- This identification test can be carried out simultaneously with the determination of the mass fraction of pyrimethanil. In the same chromatographic operating conditions , The peak of a retention time in the sample solution and the standard solution of amine Pyrimethanil retention time, the relative difference should be less than 1.5%.

cm⁻¹

1 pyrimethanil standard infrared spectrum of FIG.

Determination of the mass fraction of 4.4 pyrimethanil

4.4.1 Method summary

Sample dissolved in mobile phase, methanol water, phosphoric acid as the mobile phase, used as a filler C18 stainless steel column and UV detector (300 nm), the sample pyrimethanil reverse phase high performance liquid chromatography, external standard. It may also be determined using gas chromatography, color Spectrum operating conditions, see Appendix B.

4.4.2 Reagents and solutions

Methanol. HPLC grade;

Water. The new secondary steam distilled water;

Phosphoric acid;

Pyrimethanil Sample. pyrimethanil known mass fraction, w>=98.0%.

4.4.3 Instruments

HPLC. a variable wavelength UV detector;

Chromatographic data processor or workstation;

Column. 250mm x 4.6mm (id) stainless steel column, the contents C18,5 μ m filler;

Filter. membrane pore size of about 0.45 μ m;

Microsyringe. 50 μ L;

Quantitative sampling tube. 5 μ L;

Ultrasonic cleaning.

4.4.4 HPLC operating conditions

Mobile phase. [Psi] [methanol. water (adjusted with phosphoric acid pH = 3)] = 75.25, filtered through a filter, and degassed;

Flow rate. 1.0mL/min;

Column temperature. room temperature;

Detection wavelength. 300nm;

Injection Volume. 5 μ L;

Retention time. pyrimethanil about 5.5min.

Are typical operating parameters of the above, according to the characteristics of different instruments, for a given operating parameters appropriately adjusted to obtain the best result.

Typical pyrimethanil original drug by HPLC is shown in Figure 2.

1 --- pyrimethanil.

Figure 2 HPLC original drug pyrimethanil

4.4.5.1 Preparation of standard solution

Weigh 0.1 g of pyrimethanil standard (accurate to 0.0001g), was placed in a 50mL volumetric flask, add the mobile phase is shaken to dissolve, with the flow Phase was diluted to the mark. With the above-described pipette 5mL sample solution flows to the other phase in dilute 50mL volumetric flask, Shake well.