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Imidacloprid soluble concentrate

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(English Translation)

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Table of Contents

Foreword
1 Scope
2 Normative references
3.1 Composition and appearance
3.2 Technical Specifications
4.1 General provisions
4.2 Sampling
4.3 Identification Test
4.4 Determination of the content of Imidacloprid
4.5 Determination of Moisture
4.6 PH value measured
4.7 Solution stability
4.8 Low temperature stability test
4.10 Product inspection and acceptance
5 Marking, labeling, packaging, storage, security and guarantee period
5.1 Marking, labeling, packaging
5.2 Storage
5.3 Security
5.4 Warranty Period

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.

This draft standard method using the reformed modified using FAO Specifications 582/SL (May2006) "may imidacloprid solution." this standard FAO Specification 582/SL (May2006) and the main technical difference Cause "may imidacloprid solution" are as follows.

Standard control --- moisture present and pH ranges two indicators, FAO specifications uncontrolled these two indicators. The standard ratio Indicators Project FAO specifications comprehensive.

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).

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1 Scope

This standard specifies the requirements and test methods, marking, labeling, packaging, storage and transportation and to ensure that the solution can imidacloprid.

This standard applies to a dissolution aid imidacloprid and processed in a suitable water-soluble organic solvent may be imidacloprid solution.

Note: The other name, structural formula and basic physicochemical parameters of imidacloprid 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 14825 Method for determination of pesticide suspension GB T 19136 Determination of heat storage stability of pesticide /GB/T 19137 Pesticide low temperature stability determination

3.1 Composition and appearance

This product shall be made compliant imidacloprid and necessary auxiliaries, should be stable homogeneous liquid, no visible suspended matter and precipitation.

3.2 Technical Specifications

Imidacloprid solution may be in accordance with Table 1.

Table 1 imidacloprid solution may be controlled Item Index

project

index

5% 10% 20%

Imidacloprid mass fraction /% 5.0 0.5-0.5 1.2-1.2 20.0 10.0 1.0 to 1.0 Moisture /% ≤ 0.5
the pH range of 5.0 to 8.0 TABLE 1 (cont.) project index 5% 10% 20% Qualified solution
stability Low temperature stability of a qualified Passing a heat storage stability Low
temperature stability test, the thermal storage stability test was measured every three
months, at least once during a normal production.

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 "liquid formulation sampling" approach. Determining Sample packages with a random number table method; final sample size not less than 200mL.

4.3 Identification Test

The present liquid chromatography ---- identification test can be conducted simultaneously with the determination of the mass fraction of imidacloprid. Chromatography under the same operating conditions, A peak sample solution retention time in the standard solution imidacloprid retention time of the peaks, the relative difference of 1.5% should be or less.

4.4.1 Method summary

Sample dissolved in mobile phase, methanol and water as mobile phase, used as a filler C18 stainless steel column and UV detector at a wavelength of at 260nm, of the sample imidacloprid RP-HPLC separation and determination, external standard.

4.4.2 Reagents and solutions

Methanol. HPLC grade;

Water. The new secondary steam distilled water;

Imidacloprid Sample. A known mass fraction $w \geq 99.0\%$.

4.4.3 Instruments

HPLC. a variable wavelength UV detector;

Chromatographic data processor or chromatography workstation;

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

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) = 40:60, by membrane filtration, and degassing;

Flow rate. 0.8mL/min;

Column temperature. room temperature (temperature change should be less than 2 deg.] C);

Detection wavelength. 260nm;

Injection Volume. 5 μ L;

Retention time. imidacloprid about 6.0min.

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.

A typical solution may imidacloprid HPLC is shown in Figure 1.

1 --- imidacloprid.

HPLC FIG 1 FIG solutions can imidacloprid