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Fluoroglycofen-ethyl emulsifiable concentrates

乙羧氟草醚乳油

(English Translation)

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Foreword

The standard Chapter 3, Chapter 5 is mandatory, the rest are recommended.

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

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

The standard proposed by China Petroleum and Chemical Industry Association.

This standard by the National Standardization Technical Committee on Pesticides (SAC/TC133) centralized.

1 Scope

This standard specifies the Fluoroglycofen ether EC requirements, test methods and marking, labeling, packaging, storage and warranty.

This standard applies to acetic fluoroglycofen original drug formulation with an emulsifier dissolved in a suitable solvent from the ethyl fluoroglycofen EC.

Note: Other name, structural formula and basic physicochemical parameters Fluoroglycofen ether in Appendix A.

2 Normative references

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

GB/T 1600 Determination of Water Pesticides Determination of GB/T 1601 Pesticides pH value GB/T 1603 Determination of emulsion stability of pesticide GB/T 1604 Goods pesticide regulations for acceptance GB/T 1605-2001 Sampling Method commercial pesticides GB 4838 EC pesticide packaging GB/T 6682-2008 analytical laboratory use specifications and test methods (ISO 3696. 1987, MOD) GB/T 8170-2008 revised value represents about rules and limit values and judgment GB/T 19136 Determination of Pesticide Thermal storage stability GB/T 19137 Pesticide cryogenic stability Determination

3.1 Composition and appearance

This product should be compliant Fluoroglycofen ether emulsifier dissolved drug and formulated in a suitable solvent, it should be stable homogeneous liquid Body, no visible suspended matter and sediment.

3.2 Technical Specifications

B fluoroglycofen EC shall comply with the requirements of Table 1.

Table 1 B fluoroglycofen EC quality control program indicators

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Fluoroglycofen ether mass fraction /% 10.0 20.0 1.2-1.2 1.0 to 1.0 Moisture content /% ≤ 0.5 pH range 4.0 to 6.0 Emulsion stability (diluted 200 times) Qualified

Table 1 (continued)

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Low temperature stability a qualified Thermal storage stability of a qualified when a normal production, low-temperature storage stability and thermal stability test, measured at least

once every six months.

Test Method 4

Safety Tips. Use of this standard shall have practical experience of laboratory personnel work. This standard does not point out all of the safety issues. Make with those who have the responsibility to take appropriate safety and health practices and to ensure compliance with the relevant national regulations.

4.1 General provisions

This standard reagents and water in the absence of other requirements specified, refers to three analytical reagent and GB/T 6682-2008 specified in water. Test results determined in accordance with GB/T 8170-2008 4.3.3 Rounding the value comparison method.

4.2 Sampling

According to GB/T 1605-2001 in "liquid formulations sampling" approach. Determining sample package using a random number table method; the final sample size not less than 250mL.

4.3 Identification Test

Liquid chromatography --- The identification test can be carried out simultaneously with the determination of ethyl fluoroglycofen mass fraction. In the same chromatographic operating conditions , The retention time of the standard solution and the sample solution to a chromatographic peaks in the B fluoroglycofen chromatographic retention time, the relative difference should 1.5% or less.

Gas Chromatography --- The identification test can be carried out simultaneously with the determination of ethyl fluoroglycofen mass fraction. In the same chromatographic operating conditions , The retention time of the standard solution and the sample solution to a chromatographic peaks in the B fluoroglycofen chromatographic retention time, the relative difference should 1.5% or less.

4.4.1.1 Method summary

Sample was dissolved in chloroform, dicyclohexyl phthalate esters as internal standard, using a HP-5 fused silica capillary column coated walls, and hydrogen fire Flame ionization detector, a sample with acetic fluoroglycofen capillary gas chromatography and determination.

4.4.1.2 Reagents and solutions

Chloroform;

B fluoroglycofen standard. a known mass fraction $w \geq 99.0\%$;

Dicyclohexyl phthalate ester. not interfere with the analysis of impurities;

Internal standard solution. Weigh 7.5g dicyclohexyl phthalate esters into 1000mL volumetric flask, dissolved with chloroform, constant volume, Shake well.

4.4.1.3 Instruments

Gas chromatograph. with flame ionization detector;

Column. 30m x 0.32mm (id) quartz capillary column, wall coated HP-5, film thickness 0.25 μ m;

Chromatographic data processor or chromatography workstation.

4.4.1.4 GC operating conditions

Temperature ($^{\circ}$ C). Room 230 column, the gasification chamber 260, detection chamber 280;

Gas flow rate (mL/min). carrier gas (N₂) 1.8, hydrogen gas 30, air 300, the compensation gas 25;

Split ratio. 30.1;

Injection volume. 1.0 μ L;

Retention time. Fluoroglycofen ether about 10.8min, internal standard about 7.9min.

GC operating conditions described above, the Department of typical operating parameters. According to the characteristics of different instruments, given operating parameters adjusted as appropriate, in order to obtain the best results. Typical B fluoroglycofen EC and the internal standard gas chromatography is shown in Figure 1.

1 --- internal standard;

2 --- Fluoroglycofen ether.

Figure 1 B fluoroglycofen EC and the internal standard gas chromatograph

4.4.1.5.1 Preparation of standard solution

Weigh Fluoroglycofen ether standard 0.05g (accurate to 0.0002g), placed in a glass bottle stopper, with a pipette accurately added 5mL within Standard solution, shake.