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

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**Thiosultap-monosodium water soluble powders**

杀虫单可溶粉剂

**(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 requirements Monosultap soluble powders, test methods and marking, labeling, packaging, storage and warranty.

This standard applies to Monosultap soluble powders by the Shachongdan original drug, suitable additives and fillers processed into.

**Note:** Other name, structural formula and basic physicochemical parameters Monosultap see 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.

Preparation of GB/T 601 chemical reagent standard titration solution Determination of GB/T 1601 Pesticides pH value GB/T 1604 Goods pesticide regulations for acceptance GB/T 1605-2001 Sampling Method 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 revised value represents about rules and limit values and judgment GB/T 19136 Determination of Pesticide Thermal storage stability

### 3.1 Composition and appearance

This product should be compliant Monosultap original drug is made, the appearance of a homogeneous powder, without clumps.

### 3.2 Technical Specifications

Monosultap soluble powders should meet the requirements of Table 1.

Table 1 Monosultap soluble powders Control Project Index

Thermal storage stability test a qualified when a normal production, the degree of dissolution and solution stability, thermal storage stability test was measured at least once every three 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. The test standard titration solution, did not indicate when the other requirements, according to GB/T 601 requirements preparation and calibration. test result Determination of GB/T 8170-2008 4.3.3 Rounding the value comparison method.

#### 4.2 Sampling

According to GB/T 1605-2001 "on solid preparation sampling" approach. Determined by sampling a random number table method packages, the final sample size not less than 300g.

#### 4.3 Identification Test

HPLC --- The identification test can be carried out simultaneously with the determination of the mass fraction of Shachongdan. In the same chromatographic operating conditions , The sample solution to a chromatographic retention time and Monosultap standard solution Shachongdan chromatographic retention time should be relative difference 1.5% or less.

##### 4.4.1 Method summary

Sample dissolved in mobile phase, methanol aqueous potassium dihydrogen phosphate (pH7.0) as the mobile phase, to use as filler AgilentTCC18 Stainless steel column and UV detector (220nm), the sample of Shachongdan reverse phase high performance liquid chromatography, external standard.

##### 4.4.2 Reagents and solutions

Methanol. HPLC grade;

Water. The new secondary steam distilled water;

Potassium hydroxide solution.  $c(\text{KOH}) = 2\text{mol/L}$ ;

Potassium dihydrogen phosphate.  $c(\text{KH}_2\text{PO}_4) = 0.035\text{mol/L}$ , potassium hydroxide solution with a pH value adjusted to 7.0;

Monosultap standard. a known mass fraction  $w \geq 99.0\%$ .

##### 4.4.3 Instruments

High performance liquid chromatography. a variable wavelength UV detector;

Chromatographic data processor or chromatography workstation;

Column. 250mm x 4.6mm (id) stainless steel column, built AgilentTCC18,5 $\mu$ m filler (or with equivalent effect Column);

Filter. pore size of about 0.45 $\mu$ m;

Micro injector. 50 $\mu$ L;

Quantitative sample line. 10 $\mu$ L;

Ultrasonic cleaner.

#### **4.4.4 HPLC operating conditions**

Mobile phase. Psi (methanol. potassium dihydrogen phosphate) 5.95, with 0.45 $\mu$ m filter membrane, ultrasound 10min spare;

Flow rate. 1.0mL/min;

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

Detection wavelength. 220nm;

Injection volume. 10 $\mu$ L;

Retention time. 5.5min.

It said operating parameters are typical, according to the characteristics of different instruments, given operating parameters adjusted as appropriate, in order to obtain the best results.

Typical Monosultap soluble powders HPLC is shown in Figure 1.

1 --- Monosultap.

Figure 1 Monosultap Soluble Powder by HPLC diagram

#### **4.4.5.1 Preparation of standard solution**

Weigh 0.1g (accurate to 0.0002g) Shachongdan standard, a 50mL volumetric flask, dissolved in mobile phase and dilute to the mark, Shake well.

#### **4.4.5.2 Preparation of sample solution**

Take a sample containing said Monosultap 0.1g (accurate to 0.0002g), and a 50mL volumetric flask, dissolved in mobile phase and dilute to the mark Degree, shake.

#### **4.4.5.3 Determination**

Under these operating conditions, after the instrument is stable, continuous injection of several doses of the standard solution until the two adjacent needles Monosultap peak area relative change After less than 1.2%, according to the solution, the sample solution, the