УДК 543.06:543.89

Іван Мага
Закарпатська регіональна державна лабораторія ветеринарної медицини, Україна

ВИКОРИСТАННЯ РЕАКЦІЇ АЗОСПОЛУЧЕННЯ ДЛЯ ХРОМАТОГРАФІЧНОГО ВИЗНАЧЕННЯ 4МЕТОКСІ-3,5-ДИМЕТИЛАНІЛІНУ У ВИГЛЯДІ ТРИАЗЕНУ

Ivan Maga

USING AZO COUPLING REACTION TO DETERMINE THE 4-METHOXY-3,5-DIMETHILANILINE AS TRYAZENE

The the **4-methoxy-3,5-dimethilaniline** (MDA) is the product of biodegradation of many pesticide active ingredients: shradane, ompa. sutam etc, who have or have had wide application in agriculture for the cultivation of various crops. Melting point 87,4 °C Boiling point 171 °C, Density 1411 g/m^3, In addition to pesticides commonly used in the synthesis of dyes, pigments, pharmaceuticals, and other important products. MDA has toxic and carcinogenic.

For conversion to the hydrophobic form MDA nd improved metrological characterization used derivatization reaction with 4-nitrophenyldiazonium cation with forming triazenes MDA. Formation azoderivates largely depends on the pH of the medium. To study this effect derivatization reaction was carried out in a wide range of hydrogen ion concentration of 2.2 to 13,9 pH. Important for the formation of triazenes MDA has a reagent concentration. To study the impact of such a series of experiments was supplied in which the concentration of diazonium cation varies 1vid 30 fold amount relative to the amount MDA. Infra-red spectra were recorded by Abatop, firm Nicolatt (USA) spectrometer with KBr pellets. Liquid chromatography was carried out in Perkin-Elmer chromatograph with a spectrophotometer detector. A stainless steel column (250×4.6 mm) was filled with Silasorb C18. The chromatography was performed in a mode of isocratic elution of movable phase content (acetonitrile : water = 2 : 1). The flow rate was 1 M. The chromatography results were processed using the programs "Multichrom" and "Millenium".. For extraction and retrieve azoderivates investigated several organic solvents hexane, toluene, *o*-xylene, dichloromethane, chloroform, dichloroethane, ethyl acetate, butyl acetate, isoamyl acetate. Retention time is 8.3 minutes. there is a single symmetrical peak, indicating a lack of imposition of impurities that would interfere malls definition.

The method of determining MDA in soils and into wastewater by high performance liquid chromatography with a spectrophotometer detector. Technique developed and tested in MDA determining a triazine HPLC in soils and wastewater. The method was tested on simulated samples and real objects. Present metrological processing of the results. This simple, sensitive and accurate method provides an alternative way to rapidly analyze and monitor MDA A in soils and wastewater samples. Method can be used to determine the MDA and other objects at some refinement analysis techniques.