CIPAC STATUS REPORT

04/08/2019



0749 Dinotefuran

Allocated to J

CIPAC methods published in:

CIPAC L, p. 67

CIPAC 47th meeting, June 2003 in Bucharest

Mrs Kumeta presented a small scale Collaborative study by JAPAC for the determination of dinotefuran in one technical material, and four formulation (two wettable powders and two water soluble granules) samples. Five laboratories participated in the study. Mr Bura asked if there is a special reason for using a C₈ HPLC column instead of a C18 column. It was used in order to get better symmetry of the peak of the a.s. Dr Müller asked if it was necessary to use an "Symmetry" column or if any equivalent C8 column could be used instead. Mrs Kumeta answered that it is possible to use equivalent column. Mr. Schreuder made a remark concerning the sample preparation: first dissolve in methanol, add water and mix and fill to volume.

CIPAC 48th meeting, June 2004 in Brno

Mrs Kumeta presented the results of a collaborative study by JAPAC on one technical material (TC), two wettable powder formulations (WP) and two water soluble granules formulations (SG) in which dinotefuran was determined by reverse phase HPLC, C8-column, UV detection at 270 nm and external standardisation. Eleven laboratories participated in the study. None of the outliers or strugglers were eliminated. JAPAC proposed the method to be accepted as Provisional CIPAC method.

Mr. Hill suggested adding to the method that a clean guard column should be used to keep the specificity. He noted that in the method description it might be useful to have a reference to the necessity to control the pH. Mr. Müller proposed a reduced flow-rate due to the high back-pressure, which could damage the column and lead to peak broadening due to dead volumes generated by breakdown of the stationary phase.

<u>Decision</u> The reversed phase HPLC method (CIPAC/4371) for the determination of dinotefuran in TC, WP and SG formulations was accepted as **provisional** CIPAC method.

CIPAC 49th meeting, June 2005 in Utrecht

<u>Decision</u> The reversed phase HPLC method (CIPAC/4371) for the determination of dinotefuran in TC, WP and SG formulations was accepted as **full** CIPAC method.

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CIPAC 61th meeting, June 2017 in Rome

Mr Onie Tsabari presented a study of the **method extension** for determination of dinotefuran in bait samples formulations by HPLC/UV.

Five fresh samples of bait formulations with the active ingredient dinotefuran and five samples after accelerated storage of 8 weeks at 40 °C were analysed using the HPLC method. The CIPAC LC/UV method was modified for dinotefuran concentration in formulation samples. Calculations were carried out using UV detector at λ =270 nm. The results and the chromatograms of the analysis were presented.

The following comments were received from the meeting:

- > One comment was received: the study was carried out in just one laboratory.
- \succ No questions were received.

Closed Meeting:

The extension of the scope (CIPAC/5097) of CIPAC method 749/TC/M/3 for the determination of the dinotefuran content in bait formulations, with the modification of the eluent profile and sample preparation, was accepted as a **tentative** CIPAC method, with the need for the provision of a second data set according to the provisions of the CIPAC guideline.

CIPAC 62nd meeting, June 2018 in Panama City

Dinotefuran method extension to RB by Mr Onie Tsabari (5165)

Mr Tsabari presented the results of an additional study which resulted from remarks made at the 61st CIPAC annual meeting (Rome, 2017). In 2017 the CIPAC meeting concluded that a second dataset was missing and that this had to be added.

The analytical method consisted of extraction with water/methanol (solid material) or dilution with water (liquid formulations) followed by HPLC chromatography on a reversed phase C8 type column and UV-detection at 270 nm. The study (five replicates, one day) was performed in another laboratory when compared to the previous experiment and resulted in and RSDr of 2.6%. No additional validation parameters were reported.

No comments were received from the meeting.

Closed Meeting:

The requested additional dataset was presented, therefore the method extension can be promoted to a **provisional** method. Mr Bascou remarked that the formulation type RB consists of a large variety of products which makes it difficult to assess whether the performed very basic validation is adequate for all products in RB formulations. As the validation was conducted for sugar solution, this will be mentioned in the description of validity of the method.

CIPAC 63rd meeting, June 2019 in Braunschweig

Closed Meeting:

At the previous meeting, the method was accepted as provisional. No further comments were received. The method can be promoted to a **full CIPAC method**.