

Annual CIPAC/FAO/WHO Report Form on the Quality Control of Pesticides

Country/Name and Address of the Institution (contact person):

Czech Republic

Central Institute for Supervising and Testing in Agriculture (CISTA)

National Reference Laboratory

Department of Testing Plant Protection Products

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1 - Essential Information

Reporting period/year:	Number of samples analyzed (1)	Number of non-compliance (2)	Uses (3) (optional)
2013	54 (+13)	25	Agricultural use: 67
			Public Health use: -
			Home and Garden use: included in total,
			Other uses (please specify):

(1) Any sample, including those of active inspection and registration control samples.

(2) Non-compliance with FAO/WHO or national pesticide specifications (or Commission Implementing Regulation (EU)).

The reason of non-compliance:

3 samples – lower active ingredient content or higher content of relevant impurities

18 samples – differences in fyz-chem properties with FAO or national pesticide specifications

7 samples – different chemical composition from referent product (e.g. impurities, formulation ingredients...)

(3) If possible, please indicate the use/destination of the pesticide analyzed. If the pesticide has various uses, it should be included only in one category and should be explained under item 2 (comments).

2 - Any comments and/or background information

54 plant protection products (PPP), including 34 parallel imports and suspicious samples, were laboratory checked within the postregistration control and 13 PPP within the process of PPP approval.

All 67 samples (32 active ingredients) were analyzed for active ingredient content and their relevant impurities content before and after storage stability test at 54°C, 40°C. Moreover liquid formulations of samples were subjected also to stability test at 0°C for 7 days. Physical and chemical properties of samples were tested according to recommendation in FAO specification or national pesticides specification (2255 laboratory tests). Samples of EC formulations were analyzed for xylene. Parallel imports and suspicious samples were compared with their referent products. All samples represent 6 types of formulations.

3. Department of Testing Plant Protection Products in following collaborative and PT trials

a) CIPAC Activities:

- Toluene
- Trifloxystrobin

b) ESPAC Activities:

- Silthiofam

c) AAPCO Activities

Successful participation in:

- glyphosate
- chlorothalonil
- trifluralin
- pendimethalin
- dimethenamid-p

c) AFSCA Activities - Proficiency testing of physicochemical properties of pesticides formulations

Successful participation in all tested parameters in SG formulation:

- Active ingredient content – glyphosate
- water (CIPAC MT 30.5) ;
- pH dilution (CIPAC MT 75.3) ;
- Foaming properties (CIPAC MT 47.2) ;
- Acidity H₂SO₄(CIPAC MT 191) ;
- Dissol. degree and dilution stability (CIPAC MT 179) ;
- Flowability (CIPAC MT 172).

4. – Accreditation of Laboratory

Department of Testing Plant Protection Products was accredited according to EN ISO/IEC 17025:2005 by Czech accreditation body in May 2008 and received **Certificate of Accreditation**. In 2011 laboratory was successfully reaccredited.

Laboratory has 15 accredited methods:

- Determination of density of liquid formulations by tensiometer TD 1 Lauda according to CIPAC MT 3.1 and MT 3.3.1
- Potentiometric determination of pH value of a mixture of a sample with water or of an undiluted aqueous formulation according to CIPAC MT 75.3
- Wet sieve test – gravimetric determination of nondispersible material in formulations according to CIPAC MT 185
- Wetting of wettable powders and granules by visual method according to CIPAC MT 53.3.1
- Determination of water by Karl Fischer method according to CIPAC MT 30.5
- Dilution stability of pesticide aqueous solutions by visual method according to CIPAC MT 41
- Stability of liquid formulations at 0°C by visual method according to CIPAC MT 39.3
- Determination of particle size distribution by laser diffraction according to CIPAC MT 187
- Wet sieve test – gravimetric determination of nondispersible material in formulations according to CIPAC MT 167
- Pourability – gravimetric determination of the residue R and the rinsed residue r according to CIPAC MT 148 and CIPAC MT 148.1
- Determination of persistent foaming by visual method according to CIPAC MT 47.2
- Visual determination of emulsion stability EC and EW formulations according to CIPAC MT 36.3

- Spectrophotometric determination of free chlorophenols as 2,4-dichlorophenol or as 4-chloro-2-methylphenol according to CIPAC MT 69.1-69.6
- Determination of xylene in EC formulations by GC-FID method
- Determination of Glyphosate by HPLC/UV method according to CIPAC 284/SL/(M)/-

5. – Announcement

From 1st January 2014 State Phytosanitary Administration (SPA) and our department (Pesticide Testing Laboratory) has been joined with another institute and we use different names and contacts. The name of our new institute is **Central Institute for Supervising and Testing in Agriculture (CISTA)** and new name of our department is **Department of Testing Plant Protection Products**. Also the e-mail contacts and www.pages have been changed (see address above).